# STATUS OF THE SUPERFUND HAZARDOUS WASTE CLEANUP PROGRAM AND THE IMPLEMENTATION OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA)

(100-69)

# HEARING

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES

OF THE

COMMITTEE ON
PUBLIC WORKS AND TRANSPORTATION
HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

SECOND SESSION

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# STATUS OF THE SUPERFUND HAZARDOUS WASTE CLEANUP PROGRAM AND THE IMPLEMENTATION OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA)

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THURSDAY, JULY 7, 1988

House of Representatives,
Subcommittee on Water Resources,
Committee on Public Works and Transportation,
*Washington, DC.*

The subcommittee met, pursuant to notice, at 9:33 a.m., in room 2167, Rayburn House Office Building, Hon. Henry Nowak (chairman of the subcommittee) presiding.

Mr. Nowak. The subcommittee will come to order.

This morning, the Subcommittee on Water Resources meets to receive testimony from the Environmental Protection Agency on the status of the Superfund hazardous waste cleanup program and the implementation of the Superfund Amendments and Reauthorization Act of 1986.

Testifying on behalf of EPA is Mr. J. Winston Porter, the Assistant Administrator for Solid Waste and Emergency Response. He is accompanied by Mr. Jonathan Cannon, Acting Director of the Office of Waste Program Enforcement, and Mr. Henry Longest, Director, Office of Emergency and Remedial Response.

Congress enacted the original Superfund law in late 1980. The law allows for the cleanup or the compelling of cleanup of hazardous waste sites and enables Federal and State governments to be reimbursed for cleanup costs and for damages to natural resources. Cleanup costs and responsibility for cleanup are established under a system of strict, joint and several liability, negating any need to show fault on the part of the owner or operator and providing what was thought to be an effective mechanism to facilitate cleanups.

Unfortunately, since its inception, the Superfund program has been the subject of much debate and controversy. During the first few years of the program, it was characterized by delays and mismanagement. Although those individuals are gone from the program, it was against that background that Congress enacted the 1986 amendments detailing the expected administration of the program.

The 1986 amendments reauthorized Superfund for 5 years and quintuple the size of the fund to $8.5 billion. It responds to criticisms regarding the pace of the cleanup activities by imposing numerical goals which EPA is expected to meet for studies and cleanup and addresses the "how clean is clean" issue by requiring application of specific standards, requirements, criteria, or limitations established under other Federal or State environmental laws if they are legally applicable or relevant and appropriate under the circumstances.

EPA is required to prefer remedies which permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances over remedies not involving such treatment and to review sites no less than every 5 years when such a remedy is not chosen. Other changes include a public review of a proposed remedy, several inducements to facilitate settlements, and an emergency planning and community right to know program.

Today, Mr. Porter will discuss EPA's implementation of these broad amendments. EPA has been requested specifically to discuss the following: revisions to the National Contingency Plan, EPA's enforcement and cost recovery activities, the impact of EPA activities under the act, revisions to the hazardous ranking system, and EPA's deferred listing policy.

Before we begin today's hearing, I would like to yield to my distinguished colleague, the ranking minority member of the subcommittee, Arlan Stangeland from Minnesota.

Mr. Stangeland?

Mr. **Stangeland**. Thank you, Mr. Chairman.

At this time, I would like to yield to the ranking member of the full committee, Mr. Hammerschmidt, for his statement.

Mr. **Hammerschmidt**. I thank my colleague for yielding.

Mr. Chairman and members of the committee, I want to welcome Dr. J. Winston Porter who, of course, is the Assistant Administrator for Solid Waste and Emergency Response and the others here from EPA who will describe the agency's implementation of the Superfund program. They are in the somewhat unenviable position of having to administer a very complex and cumbersome statute and then come before the Congress to defend their actions.

It has been 20 months since Congress enacted the comprehensive reauthorization bill, and during that time, EPA has issued countless guidelines and proposed numerous regulatory changes to implement the sweeping changes mandated by Congress. Despite these efforts, the agency has recently come under attack for failing to adhere to the letter and intent of the 1986 amendments.

Today, Dr. Porter and his colleagues will have the opportunity to describe EPA's efforts to implement the recent amendments and to respond to some of the current criticism. Certainly, it is appropriate that this subcommittee carefully review the progress that has been made in carrying out the reauthorization bill we helped draft.

So, Mr. Chairman, I would like to thank you as well as the ranking Republican on the subcommittee, the Honorable Arlan Stangeland of Minnesota, for scheduling today's hearings, and I would like to submit a more complete statement for the record.

Mr. **Nowak**. Without objection, we will certainly accept your statement.

[The prepared statement of Mr. Hammerschmidt follows:]

## STATEMENT OF HON. JOHN PAUL HAMMERSCHMIDT, SUPERFUND HEARING, WATER RESOURCES SUBCOMMITTEE

Thank you Mr. Chairman. I am pleased that we are holding today's hearing on EPA's implementation of the Superfund Amendments and Reauthorization Act (SARA).

I want to welcome Dr. J. Winston Porter who is the Assistant Administrator for Solid Waste and Emergency Response and the others from EPA who will describe the Agency's implementation of the Superfund Program. They are in the somewhat unenviable position of having to administer a very complex and cumbersome statute and then come before the Congress to defend their actions.

The Comprehensive Environmental Response, Compensation and Liability Act was authorized in the closing days of the 96th Congress to address the environmental threats posed by abandoned and leaking hazardous waste dumps. The statute provided the President with sweeping powers to address a problem of growing concern brought to our attention nationally as a result of the Love Canal situation.

The legislation authorized the President to undertake remedial actions or to require responsible parties to take actions necessary to clean up hazardous substances or other contaminants which pose a threat to human health and the environment. The act also establishes a broad system of liability for generators, site owners and operators, and transporters of hazardous waste for certain cleanup costs and damages to natural resources.

In addition, the law established a fund, financed through a tax on petrochemical feed stocks, to pay the governmental response costs incurred in carrying out the statute.

Although the statute conferred broad powers on the President, it has proven to be an extremely difficult law to administer. In part, this is due to the rather complex nature of the problem posed by abandoned hazardous waste dumps.

Often these sites involve countless numbers of contributors who have deposited various chemicals without adequate environmental safeguards or any clear recordkeeping. Perhaps most importantly these sites pose a genuine challenge in terms of the design and implementation of appropriate remedial action. The costs of cleanup can be staggeringly high while the level of confidence that the cleanup is effective can be dismally low.

It was with this background that Congress took up the task of reauthorization in 1985. The reauthorization process spanned 2 years of painstaking and, at times, very painful deliberations by this committeee as well as numerous other committees of the House and Senate. Our efforts culminated in legislation which left the basic fabric of the original act intact, but expanded greatly on the requirements, standards and policies which EPA was to apply in administering the program.

SARA required EPA to pursue cleanup options which involved a higher degree of permanence than the Agency had been employing previously. The act also established a tough schedule for initiation and completion of the studies and cleanups required to address our worse hazardous waste sites.

The act also authorized a number of incentives and inducements to stimulate private party cleanup and to encourage settlements among responsible parties. Finally, the act called for a major increase in the amount of tax revenue to pay for a five-fold increase in funding for the program.

It has been 20 months since the Congress enacted the Comprehensive Reauthorization bill. During that time, EPA has issued countless guidelines and proposed numerous regulatory changes to implement the sweeping changes mandated by Congress. Despite these efforts, the Agency has recently come under attack for failing to adhere to the letter and intent of the 1986 amendments.

Today, Dr. Porter will have the opportunity to describe EPA's efforts to implement the recent amendments and to respond to some of the current criticism. Certainly, it is appropriate that this subcommittee carefully review the progress that has been made in carrying out the reauthorization bill that we helped draft.

In closing, Mr. Chairman, I would like to thank you, as well as the ranking Republican on the subcommittee, the Honorable Arlan Stangeland of Minnesota, for scheduling today's hearings.

Today's hearing will be our first look at the program since the 1986 amendments and it will set the stage for any future deliberations by the subcommittee in the months to come.

Mr. STANGELAND. Mr. Chairman, I would like to submit my total statement, but I will just summarize parts of it.

Mr. NOWAK. Without objection.

Mr. STANGELAND. I want to thank you, too, Mr. Chairman, for your leadership in holding this oversight hearing. I think our timing is particularly appropriate, given the recent criticisms of EPA's implementation efforts.

The Public Works and Transportation Committee, especially the Water Resources Subcommittee, has been involved extensively in the Superfund program since its beginning days in 1980.

In reauthorizing Superfuund, this committee and, indeed, all the Congress, agreed to a major overhaul of the 1980 law. After painful negotiations between Congress, EPA, the administration, and others, we have increased the trust fund by five-fold, provided specific cleanup standards and schedules, toughened enforcement provisions and penalties, increased opportunities for State and local participation, and enacted major new programs for community right to know and leaking underground storage tanks.

With all of these major reforms newly enacted into law, this subcommittee decided that the best approach would be to give the act a chance to work and not hold premature oversight hearings. Now that EPA has had over a year and a half to implement the 1986 law, today's oversight hearing is certainly appropriate and timely. While EPA has moved forward aggressively and effectively in some respects, recent criticisms by Congressional, environmental, and other interests are too strong to ignore.

Mr. Chariman, to make the program work, we have to select effective remedies and make polluters come to the table, negotiate with EPA, and pay their fair share. Otherwise, communites with dangerous dump sites remain at risk, and the Federal taxpayers end up footing the bill.

At the same time, however, expensive remedies and the uniqueness of each dump site may prevent EPA from selecting truly permanent, consistent cleanups in each instance. I am hopeful today's hearing will give all of us a better understanding of and perspective on this most complicated and controversial program.

While the scope of this particular hearing must be limited to a few areas, I do want to indicate my strong interest in other aspects of the program, both within EPA and at the State level. When you realize that 80 percent or more sites involve groundwater contamination, you begin to see that Superfund is primarily a groundwater cleanup program.

I want to make sure that EPA's cleanup decisions adequately protect groundwater and reflect the requirements in Federal and State clean water laws. The State of Minnesota appears to be doing a good job in emphasizing groundwater protection and the polluter pay principle and may serve as a model for EPA's Federal efforts.

With that, Mr. Chairman, I will close. I want to welcome Dr. Porter and his assistants. I look forward to reviewing EPA's testimony and following up with additional oversight hearings at some point in the future.

Thank you very much.

[The prepared statement of Mr. Stangeland follows:]

## STATEMENT OF HON. ARLAN STANGELAND

Thank you, Mr. Chairman. I want to commend you for your leadership in holding this Superfund oversight hearing. Our timing is particularly appropriate, given the recent criticisms of EPA's implementation efforts.

The Public Works and Transportation Committee, especially the Water Resources Subcommittee, has been involved extensively in the Superfund Program since its beginning days in 1980. In fact, the origins of Superfund can be traced back to earlier House-passed bills involving oil spill liability. With its connection to oil and harzardous substance spills (covered in section 311 of the Clean Water Act), and groundwater protection, the Public Works Committee has continued to exercise jurisdiction over the Superfund Program throughout the years. We were certainly one of the most active of many players in the 1986 reauthorization. And with your leadership, Mr. Chairman, I know we will continue to be closely involved in the development of the Superfund Program.

In reauthorizing Superfund in 1986, this committee, and indeed all of the Congress, agreed to a major overhaul of the 1980 law. After painful negotiations among Congress, EPA, the administration, and others, we increased the trust fund by fivefold, provided specific cleanup standards and schedules, toughened enforcement provisions and penalties, increased opportunities for State and local participation, and enacted major new programs for community right-to-know and leading underground storage tanks.

With all of these major reforms newly enacted into law, this subcommittee decided that the best approach would be to give the act a chance to work and not hold premature ovesight hearings. Now that EPA has had over a year and a half to implement the 1986 law, today's oversight hearing is certainly appropriate and timely. While EPA has moved forward aggressively and effectively in some respects, recent criticisms by congressional, environmental, and other interests are too strong to ignore.

Today, we will want to focus on EPA's general implementation activities, with particular emphasis on the new cleanup standards and enforcement provisions of the 1986 act. Recent testimony and congressional studies have criticized EPA for selecting short-term, ineffective cleanups and poorly managing the $8.5 billion trust fund. EPA has also received complaints that it is not aggressively pursuing potentially responsible parties before resorting to the trust fund for cleanup costs.

Mr. Chairman, to make Superfund work, we have got to select effective remedies and make polluters come to the table, negotiate with EPA, and pay their fair share. Otherwise, communities with dangerous dump sites remain at risk and the Federal taxpayers end up footing the bill. At the same time, however, expensive remedies and the uniqueness of each dump site may prevent EPA from selecting truly permanent, consistent cleanups in each instance. I am hopeful today's hearing will give all of us a better understanding of and perspective on this most complicated and controversial program.

While the scope of this particular hearing must be limited to a few areas, I do want to indicate my strong interest in other aspects of the Superfund Program—both within EPA and at the State level. When you realize that 80% or more sites involve groundwater contamination, you begin to see that Superfund is primarily a groundwater cleanup program. I want to make sure EPA's cleanup decisions adequately protect groundwater and reflect the requirements in Federal and State clean water laws. The State of Minnesota appears to be doing a good job in emphasizing groundwater protection and the polluter pay principle, and may serve as a model for EPA's Federal efforts.

With that, Mr. Chairman, let me close so we can get to the business at hand as soon as possible. Let me also welcome Dr. Porter and his assistants. I look forward to reviewing EPA's testimony and following up with additional oversight hearings at some point in the future.

Mr. NOWAK. Thank you, and thank you for your interest in this hearing, and, certainly, your leadership in developing the 1986 act while ranking minority member was a leading one that really had great impact on the total act.

Let me now turn to Mr. Molinari for any statement that he wishes to make.

Mr. MOLINARI. I have no statement, Mr. Chairman, thank you.

Mr. NOWAK. All right, thank you.

We will now ask Dr. Porter, Mr. Cannon, and Mr. Longest to come to the witness table.

We have your prepared statement and you may proceed in any manner you so desire.

## TESTIMONY OF J. WINSTON PORTER, ASSISTANT ADMINISTRATOR FOR SOLID WASTE AND EMERGENCY RESPONSE, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY JONATHAN CANNON, ACTING DIRECTOR, OFFICE OF WASTE PROGRAM ENFORCEMENT; HENRY LONGEST, DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE; AND STEVE LIEFER, ACTING ASSOCIATE COUNSEL FOR WASTE, OFFICE OF ENFORCEMENT

Mr. PORTER. Thank you, Mr. Chairman.

It is a real pleasure to be here today.

I have with me, in addition to the gentlemen you mentioned, Steve Liefer who is Acting Associate Counsel for Waste in our Enforcement Office on my extreme right. He will be with us also today to help answer questions.

What I want to do, if I can, is submit my testimony for the record and then summarize some aspects of it.

Mr. NOWAK. Without objection, so ordered.

Mr. PORTER. Mr. Chairman, I want today to summarize what I think is substantial progress we have made since the law was reauthorized some 20 months ago. I am going to skip quickly through a lot of aspects of this, but I do want to give you some sense of the amount of work going on. I want to also talk about some areas of improvement that we see that need to be done or have been done.

Let me start right in with the response program. This is the program where we do removal actions and the long-term remedial actions. This is basically the heart of the program.

Since SARA, that is, the Superfund Amendments and Reauthorization Act, passed in October of 1986, we have done removal actions or begun them at 315 sites and completed 271. We have had responsible parties begin an additional 101 sites and complete 65.

Since the Superfund began, we have done over 1200 removal actions in this program. So, I think one of the unequivocal good news stories you don't hear too much about in Superfund is the large number of removals (the short-term cleanups needed at sites which are leaking or have some other immediate problems).

Let me now focus on the remedial program, which is the longer-term program for sites that require much more extensive remedies. This program involves a number of process steps.

First, we whittle down from a lot of sites. We have 29,000 sites in our inventory right now. We do first a preliminary assessment, which is a paper study, to see if other work needs to be done at these sites, and then a site inspection which is a more detailed field investigation. The site then may go on the national priority list (NPL) for funding.

Once the site is on the Superfund list, we then do the remedial investigation feasibility study which is the detailed engineering study and, finally, remedial design and remedial action.

Let me just go through these pieces real quickly to give you some sense of where we are.

Since SARA, we have done 6,000 preliminary assessments, and 1,800 site inspections. We met the statutory goal of 4,700 preliminary assessments required by 1/88.

We have now narrowed down and added to where we have 1,177 sites on the national priority list or proposed for the list.

Into the RI/FS or study phase of the program, again, we are on track to meet the statutory requirement. The law requires 275 RI/FS, starts by October of 1989. We have started a total of 157 to date, so we should have no problem in meeting that statutory requirement also.

Some of the areas of improvement, that we have been criticized in the program is taking too long on these studies. I recently asked the regions to try to complete these studies, as a general matter, in 18 months. We have done some other things to affect that. We are trying to get much more crisp in our studies to see if we can't get the focus very quickly and very fast on the problems and move these RI/FS faster.

The next thing I want to discuss is after we do the study, we make the fundamental decision in the program. This is the record of decision, or ROD decision, which is the actual selection of remedy at a site. This has been the source of some debate, and I will discuss that later. You mentioned some of that.

We have made 112 records of decision since SARA, that is, we have selected the remedy at 112 sites. Notwithstanding what you may have heard in some of the recent reports, about two-thirds of these have involved treatment, a much higher percent than we were given credit for in those reports.

I think part of that is a definitional problem.

To give you some sense of the technologies, we used thermal destruction or incineration technologies at 21 sites, solidification at 8, stabilization at 7, aeration at 4 sites, soil washing at 4, biological treatment at 4, and various other technologies at 8 others. In addition, we have used pumping and treating groundwater at 47 sites.

The point I want to make, I guess, is that we have used a variety of technologies. These are very site specific decisions and very much case by case decisions.

What we have found is that no two sites are the same. I have sites out there that range from a few yards up to a few square miles. Some are landfill facilities, some are former oil reprocessing facilities, some are municipal landfills, some are former lead smelters, etc.

So, when I am told to be consistent, my response is I haven't found consistent problems, I haven't found consistent communities, I haven't found consistent geologies, hydrologies, et cetera. So, the point that we have tried to stress is you need to apply the statutory criteria in a balanced way at each site, apply all the criteria, and make a decision.

I guess the major problem we have with our critics is on the subject of cost effectiveness. The law, to me, is very clear that we are to pick cost effective remedies in addition to words like permanence and treatment and others. So, what I can tell our critics is that we are trying to abide by all of the law, not just the two or three pieces in some of these reports.

Regarding the designs of remedial actions, another very key statutory deadline is to do 175 construction starts by November of 1989. We are on track to do that. We have started, since SARA, 95 detailed designs and 48 remedial actions by the fund, 35 design engineering projects, and 25 construction projects by responsible parties.

We are getting excellent cooperation, I might add, at this point by the Corps of Engineers. The Corps of Engineers' senior management is holding monthly line by line meetings of all the sites that they are involved with us on. They are doing a lot of the design engineering and That has been very helpful.

In addition, we are trying to introduce an element of much more competition in the program among our contractors. We now have quite a few more contractors who are involved in the program so that we can give more work to those who perform and less work to those who don't perform as well.

Let me discuss the enforcement part of the program for just a minute. As you indicated, it is a fund program as well as an enforcement program. We have a number of new tools we are trying to use.

One of these is mixed funding where we can pay for part of the cleanup at a site and have the responsible parties pay for part. We have done a lot of that, but not as much as we would have liked. However, we now have a number of sites where we have identified mixed funding as an option. We have actually had four cases so far where we have used mixed funding where the PRP's have paid approximately 70 or 80 percent of the cost, and we have paid some 10 or 20 percent.

We have identified 17 other sites where we are now applying the mixed funding principle.

Another key principle is the concept of de minimis. The law told us to try to settle with people who had a very small share of the problem.

We have done 2 of those so far where we have applied the de minimis principle. We have an additional 6 in the concurrence phase right now applying the de minimis principle, and we are negotiating at 14 other sites with de minimis parties. These can either be so-called de minimis land owners, the people who own the site, or small contributors.

As you know, Mr. Chairman, we have sites where there are as many as 300 or 400 responsible parties who may be involved. So, it is critical to get some of these people away from the table, to cash out, so to speak, and get on with the principals at the site.

With respect to settlements with responsible parties, we are getting about a third of the work done now by responsible parties directly. I would like to get that up to about half. I think one way to get a lot more work done in this program is to have more work done directly by responsible parties.

The good news on that score is we have reached settlement agreements with responsible parties to do 84 engineering studies since SARA. Our target actually was 63. We have 84, so we are very pleased that we are actually ahead of target on getting those kind of settlements.

We also have settlements with responsible parties to do the remedial design and remedial action at 23 sites, a value of about $260 million. I am pleased to note today that we really are getting an increasing number of responsible parties who believe it is in their own best interest and, certainly, in ours to come forward, negotiate, and get on with the cleanup. There are huge transaction costs at these sites. We have spent more for lawyers than for engineers at many sites, and I would like to continue trying to correct that.

I just want to briefly mention Federal facilities. We have made some real progress lately. The law requires us to develop an interagency agreement between the EPA and the Federal agency at each site where the Federal facility is on the NPL.

We now have model interagency agreement language with the Department of Energy and the Department of Defense and are negotiating at a number of sites to reach closure on what they have to do. It is kind of a landmark agreement at TCAAP, the Twin Cities Army Ammunition Plant in Minnesota, which was a good start on this program. It is working well. The State of Minnesota is involved with that, and we are very pleased.

We want these agreements to be, in general, three party agreements with the State, the EPA, and the Federal agency.

The three things we have in those agreements which we are very pleased with is we have State and citizen enforceability. A State or a citizen can go into court and enforce these agreements against a Federal agency. We have dispute resolution with the EPA Administrator being the final arbitrar, and we finally have stipulated penalties built in so if they don't make certain deadlines, we and the States can advance penalties against them.

I would just briefly mention the Title III emergency planning and community right to know aspect. I know that is not the major subject today, but that is a major part of this reauthorized law.

We have established State emergency planning commissions in all 50 States. We have 3,000 local emergency planning committees set up.

On July 1, we received the community right to know information or the emissions data from some 15,000 or so facilities. These are still coming in, and we will have a massive work load to try to sift through all these emissions data which people are giving us.

I might say there is one bit of good news. One of the large chemical companies, Monsanto, in fact, after looking at their emissions that they reported to us and the State a few days ago, the chairman of the board committed to a 90 percent reduction in emissions by the year 1992. So, I think one of the good facets of this law is going to be that people are going to get a very good sense of what their emissions are, and in some cases, they are going to be somewhat surprised and are going to move to correct some of that, I hope.

The first emergency plans by these 3,000 local committees are due in October, and that will be the actual plans to deal with emergencies at the local level.

On underground storage tanks, just briefly, regulations will be effective this fall for leaking underground storage tanks. We will be approving State programs. The underground storage tank trust fund under Superfund that was set up—we have 46 cooperative agreements with the States and territories to get money out to them.

In research and development, we have 21 projects underway now under the research and development demonstration program under Superfund. Field work has been completed at 6 of them.

This is where we have a vendor come in and demonstrate their process at a real Superfund site, and that program is beginning to yield good information.

Let me just take a minute as I close here, Mr. Chairman, and talk about the two recent reports, the OTA report as well as the report by some of the environmental groups and the Hazardous Waste Treatment Council. As you may have noted in some of the press accounts, Lee Thomas and I have taken the view that these are very unfair reports. They are very simplistic and superficial. They, frankly, only look at part of the law.

They focus on permanence and treatment which is very important, admittedly, but they don't focus on the other aspects of the law which we have to administer—cost effectiveness, community input, State approval, State and local requirements, et cetera.

As you may have seen in some of the things in the press which I would be happy to discuss, I have begun to come back and give my critique. We think that if you look at it from a technical standpoint on some of their recommendations on where we should have built an incinerator, for example, my response is why would you want to incinerate a material which is primarily metals and would just come out in the ash and still require disposal.

We are not against incineration. I picked incineration at Love Canal, because the Love Canal problem was an organics problem, and we felt the best thing to do was incineration. At Times Beach, we are leaning towards incineration, because, again, it is an organics problem.

I think what those groups are focused on—and part of this is because, some of the authors are lobbyists for treatment companies—is they are really trying to force us to treatment, meaning dig everything up and burn it every time.

We are saying, first, you can't burn the metals, and that is often the problem. So, we have to be more sophisticated than the approach they have suggested.

We also have to deal with the States. Frequently, the States are not interested in paying 10 percent of a very large number if they don't think it is needed. The law requires the State to pay 10 percent of the fund-financed cleanup.

Many times, the State will say to us, we really want to talk to you about that $80 million remedy. That is $8 million out of our program. We are not sure that is really required at this site. The community may not prefer that option.

So, it is a much more complicated program than their simplistic views would lead you to believe. I don't mean to be overly sensitive. We are happy to have constructive criticism, but we thought that was a little bit unfair, and we would have liked to have had some more time to interact with these groups. They made a lot of technical errors that we could have corrected if we had had a chance to review the reports.

Let me close by saying, Mr. Chairman, that this is, as you indicated, a very large, complex program. I am quite proud of where we are at this point. We have 3,000 EPA employees, the Corps of Engineers, and a lot of State employees working very hard.

As we sit here today, we have in progress 640 engineering studies, 140 remedial designs, and 100 construction projects. So, it is a very big program.

My goals are to have good, protective, cost effective remedies.

We are going to spend the money. One of the things that we have been criticized for is that we are picking cheap remedies. We are not picking cheap remedies. We are picking cost effective remedies, because I think what Congress told us is to be cost effective, to meet these schedules—and there are many hundreds of projects waiting to be done—but, in effect, to spread the money over a lot of projects.

So, we are not at all interested in wasting money at a project, because we have lots of work (over 800 projects) going. So, we intend to spend the bulk of the $8.5 billion, no question. The question is, do we spend it all on very few sites, or do we spend it on a lot of sites?

My final goal is to increase the pace of the program. I have mentioned a number of things today about that, but we certainly need to continually work on increasing the pace of this program.

There are a lot of people involved. It can tend to get bogged down in bureaucracy if we are not careful. As I go out and be with people at these sites, the thing I hear most often from the communities and the States is we need to get on with it. So, we are trying to do that.

Thank you very much, Mr. Chairman. We will be happy to respond to your questions.

Mr. Nowak. Thank you very much for your statement. I think it is a good summary of what your written testimony tries to set forth.

You know, we make a large decision of what and where the money should go to according to some type of a ranking system that is employed. I am wondering if it is not really a case of spreading the money but of putting the money where the—the overall purpose of the program is to protect the health and environment, I guess, of our citizens in the United States, and I wonder how we dedicate those resources that you have to work with to that problem.

Could you give us some idea of how that is moving forward?

Mr. Porter. Okay. There are two things, Mr. Chairman. One is we have this system of whittling down from the 29,000 or so sites in our inventory. We are doing about 3,000 preliminary assessments a year of sites that come into us by the State and communities and others who say here is a site that needs to be looked at. So, we do a lot of screening through that program to whittle down to the worst sites.

In addition, we have the hazardous ranking system which is now in the final review stages. What we are trying to do in the hazardous ranking system, pursuant to what Congress said in the law, is to work in more environmental aspects.

One of the things Congress said in the law was to not just consider public health aspects but also other environmental aspects. So, we are going to have a little more complicated system this time, but it is going to involve more factors of running these sites through this ranking system to see if, in fact, they score high enough to be a Superfund site.

The last point I might make, Mr. Chairman, on this is that we have also had a very lively dialogue with the States, many of whom now have their own programs—Minnesota, New York, New Jersey, et cetera—in which they are doing a lot of work. There is a bit of tension—I think most of it creative, not confrontational—in what do we do and what do you do.

We have also asked in the national contingency plan that we put out for proposal to see if there is some interaction we ought to have when a State says we want to handle a site, whether we in fact should insist on putting it on the NPL or whether we should allow them to handle it. That will be an area where we will have a lot of dialogue.

Mr. NOWAK. And that really brings us to the second question. How are we in reacting to or with the States? How much influence do they have in the selecting of the remedy?

Do the States—and I suppose this would vary with the strength of the particular State or environmental council—have remedies that are more stringent or perhaps less stringent? How do you find that the States are coming back to you? What is the typical, if there is a typical?

Mr. PORTER. I think, Mr. Chairman, we are working pretty well with them. The States have to formally concur on a site where we are going to spend fund money, because, as I said, they have to pay 10 percent.

So, that is a source of some tension, because, frankly, in some States, they haven't set aside a lot of money for Superfund. So, there is some pressure on us downward to say we can't pay, as I said, 10 percent of $80 million.

However, I think we are working with most States pretty well. There is a variety. Some tend to want to do more stringent remedies. Some tend to want to be more cost effective, if that is the right term, but there is that balance between permanence and cost effectiveness.

But I think that, in general, we have worked out a pretty good modus operandi with most States, but it certainly is not absolutely consistent.

Mr. NOWAK. Regarding the standards that are in the act, you are not going below those standards in that negotiation process, are you?

Mr. PORTER. No, we are not, Mr. Chairman.

Mr. NOWAK. The States understand that basic——

Mr. PORTER. Yes, they understand that. In fact, I think that, often, the States will bring more stringent requirements to our attention, and we have to meet those.

Mr. NOWAK. In the two reports that have criticized you, you had not seen those reports prior to the newspaper article appearing?

Mr. PORTER. Mr. Chairman, I had access to one of the reports, the OTA report, for a day or so before the newspaper stories. We were given one copy and told not to copy it.

However, that was, under pressure of our appealing to the oversight committee staff that we would have a hard time answering questions at the hearing without a copy of the report. So, after we pushed pretty hard, we were given one copy.

Mr. NOWAK. When OTA prepares its reports, do they consult with your people as they are going through the process of the report?

Mr. PORTER. Yes, typically, they do. Frankly, we have a fair variation in how these are done, and this particular report was pretty much a one-way flow. They asked for information, which we gave them, and I think we were quite cooperative, but we were not allowed any chance to really interact or respond or look at drafts or anything of that nature.

So, it was, in my judgment, not a good process, and we are going to let them know that, because we think that if we had had a chance. We could have had a better interactive process on some of the technical aspects. We realized, of course, that they may be under some obligation not to release the total report until Congress says it is okay.

Mr. NOWAK. I wonder, now that the report is in your hands, if we can get your response in detail and give you the opportunity to put it on the record here, and, by doing that, of course, through the other committees in the Congress that are concerned with this bill and I am sure will be concerned with this criticism by OTA and I think the other group.

It really is a little disturbing, because many of us felt the program was moving ahead fairly well, at least in a much better manner than it had in the first two years of the program. I think that is the general feeling in the Congress, but there are so many and wide varieties of opinion on this subject, because of the complexity, I guess, of trying to have a uniform standard at greatly varying sites and problems at those sites, as you have described.

However, I think we would like to see your answers to the criticisms in both of those reports, and I would be happy to keep the record open until that were available for our review here.

Mr. PORTER. Certainly, Mr. Chairman.

Mr. NOWAK. Let me at this time turn to Mr. Stangeland for any questions he has, and I will get back to you a little later.

Mr. STANGELAND. Thank you, Mr. Chairman.

It is my understanding that not a single action has been filed in court under section 106 to compel a PRP to undertake a cleanup at a site. Why have you been unable to bring such enforcement action, and what impact has the failure to require cleanups had on your ability to enter into negotiated settlements?

Mr. PORTER. Mr. Stangeland, we have not done any this past year, you are right, but we had done some earlier. This is not to say we have done nothing. For example, we have sued a number of parties in these mixed funding settlements (the ones who haven't come forward). We have sued them under the cost recovery part of Superfund.

In addition, we are concerned about what you mentioned and developed an initiative where we are identifying some 25 or so 106 orders that we will be dealing with to see how many should be actually filed against people. We were a little startled ourselves to see how few we had done as we looked back over this past year.

On the other hand, we are getting a lot of settlements. There is lot of debate among people about what really compels people to settle. We, in fact, are getting a lot of settlements with private parties.

On the other hand, I think we have had some fairly legitimate criticism for not going after as hard as we should have, perhaps, those that didn't come forward, particularly in mixed funding settlements, but we are trying to gear up further.

I also need to point out, that what frequently happens in these negotiations is that people against whom we have good evidence tend to talk. The ones against whom we don't have good evidence tend not to talk. So, there is kind of a natural selection process.

So, when people say to me why don't you go after those bad guys, sometimes the so-called bad guys we don't have very good evidence against, and they know that. At the same time, we are, for the health of the program and to send the right kind of signals, getting together a list of 106 orders where we will be going after people who have not come forward this summer and early fall to really jump start that part of the program.

Mr. STANGELAND. How many suits have been completed under the cost recovery provision, and how many have you won?

Mr. PORTER. We have had several hundred suits under the cost recovery provision. We have some $270 million or so that have been referred to the Department of Justice. We have actually collected about $80 million worth so far.

Mr. STANGELAND. Out of $270?

Mr. PORTER. Yes, that is right.

Mr. STANGELAND. What is your relationship with Justice on tackling unilateral enforcement actions?

Mr. PORTER. I am not sure I understand, Mr. Stangeland.

Mr. STANGELAND. Well, how do you work with Justice on some of these enforcements?

Mr. PORTER. Why don't I have our enforcement person, Steve Liefer, handle that.

Mr. STANGELAND. Sure.

Mr. PORTER. Or, John, do you want to go ahead?

Mr. CANNON. Justice serves as the agency's lawyer in bringing these actions. We have been working closely with Justice in connection with the 106 initiative that Dr. Porter mentioned, and they are prepared to take a number of cases that we may be able to refer as a result of this initiative and move those cases along. We had that representation from them.

Mr. STANGELAND. Do you believe that they have committed adequate resources to handling those 106 and 107 actions?

Mr. CANNON. As of now, I do. Yes, sir.

Mr. STANGELAND. And should they be handled here or by local U.S. Attorneys?

Mr. CANNON. These 106 cases, in particular, are complex cases. We are just developing experience with them, and I think that, as a general matter, central Justice is probably better equipped to handle them although there may be cases where a local U.S. Attorney is knowledgeable and sophisticated enough to handle these cases. In those cases, I assume that DOJ would look to a relationship where a U.S. Attorney would have a significant role.

Mr. STANGELAND. In what percentage of cases has the agency employed nonbinding allocations of responsibilities, and have you found them to be helpful?

Mr. PORTER. I will respond to that, and they may want to add to this. Not many. What we have generally said on the nonbinding allocation of resources is that we will be most interested in doing that when the responsible parties tell us it would be helpful. If they say we are having trouble allocating costs among ourselves, we will do that.

We do have several working through the system, but, we have not found many people who have us to do it as opposed to their allocating it among themselves. We do have a few cases, but, we have not used that tool too much yet.

Mr. STANGELAND. And what problems have you encountered in administering the de minimis settlements?

Mr. PORTER. I think on the de minimis—we are having better luck now. One of the problems we have had is between the so-called principals in the de minimis as we try to carve out these 300 people or so to say which ones are de minimis and which ones aren't. There often breaks out a lot of haggling among those 300 people about who in fact is de minimis and who isn't. We have had some of that dialogue.

Frankly, Mr. Stangeland, we are going to try to be a little more arbitrary on that in the sense of setting a cutoff point of, say, 1 percent or so of the waste. If you are below that, in some cases, you would be declared de minimis.

My general criticism of ourselves so far is that we have probably been a little too sophisticated in trying to do this. We are trying to be so totally fair to everybody, perhaps, that we may not be serving the intent of the law which is to get some of the people out of the system, recognizing that you never have as much good data as you would like to prove explicitly of those 300 people exactly which ones are very small and which ones are somewhat larger.

However, we are going to start working on what I call the clearly de minimis. There are some people that are very clearly de minimis, and we will see if we can't speed that up.

As I said earlier, we have about 14 cases going now, and it has been more difficult than we had thought, because in trying to be fair, it has taken a fair amount of thought on our part. On the other hand, we also have some debate between the principals in de minimis on whom, in fact, are de minimis. But I think we are making progress on that.

Mr. STANGELAND. Thank you.

I have further questions, Mr. Chairman, but I will defer so some other members can have a chance.

Mr. NOWAK. Thank you very much.

Mr. Skaggs from Colorado.

Mr. SKAGGS. Thank you very much, Mr. Chairman.

Mr. Porter, we have a number of Superfund sites in the district that I represent in Colorado. I would like to inquire first with you about the concept of indirect or administrative costs which, in my discussions with your regional office, puzzled me.

Could you explain, first, what is entailed in those costs and, philosophically, how it makes sense to account for them within the context of the Superfund program?

Mr. PORTER. In the sense of EPA applying indirect costs as part of our cost recovery process?

Mr. SKAGGS. I am puzzled by that, so as it makes sense to you.

Mr. PORTER. Okay. Let me explain it in general, and my colleagues may need to help me a little. We can also respond more fully for the record if necessary.

What we have in cases where we are trying to recover costs of work we have done is we have direct costs which are easily defined for the site. Then we have certain indirect costs that relate to the general overhead in the program.

There has been a lot of debate on that—how far do you go? Do you include, for example, research and development costs in the whole Superfund program? Do you include other kinds of things like preliminary assessments at the 29,000 sites?

I don't have the precise cut on that today. I could supply it to you, but what we try to do is come up with a definition of indirect cost which we then apply as a factor on these sites for cost recovery purposes.

I think what I would like to do, is give you that split for the record as well as more philosophy on it.

Mr. SKAGGS. I would appreciate it if you would.

In response to my inquiry to your Region VIII office, I was told that basically it is an arithmetic calculation that, in the case of Region VIII, for every hour of direct labor costs on a site in 1988, you allocate $63 in administrative costs. That seems to me to be way out of proportion, at least with my common sense notion of what an appropriate administrative operational division ought to be.

Mr. PORTER. Mr. Skaggs, we can certainly check on that, but I think that if you will look, for example, at the way engineering companies bill, they take a direct labor hour of so many dollars an hour they pay, say, the engineer, and they add indirect costs. That is often a multiplyer of 2 or 3 times, that is, 100 or 200 percent on the direct labor.

It isn't administrative only in the sense of the paperwork, but there are other things that go into indirect costs that can't be allocated to a site, but we will take a look at that for you.

[The information received from Mr. Porter follows:]

*US Environmental Protection Agency*

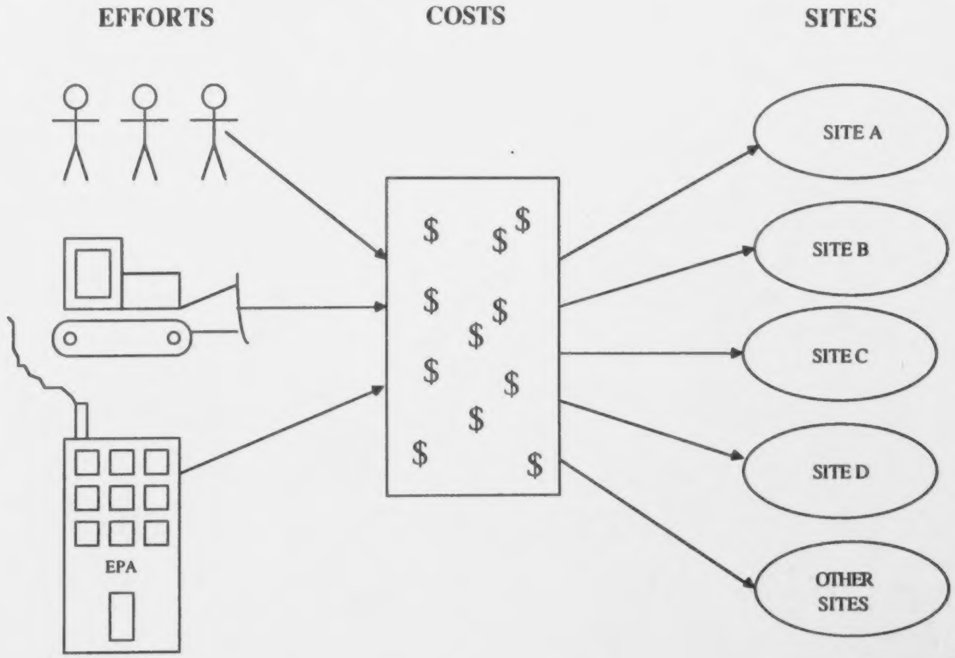
*Cost Recovery Conference*
*Atlanta, Georgia*
*March 8 - 10, 1988*

# Indirect Costs in the SARA Era

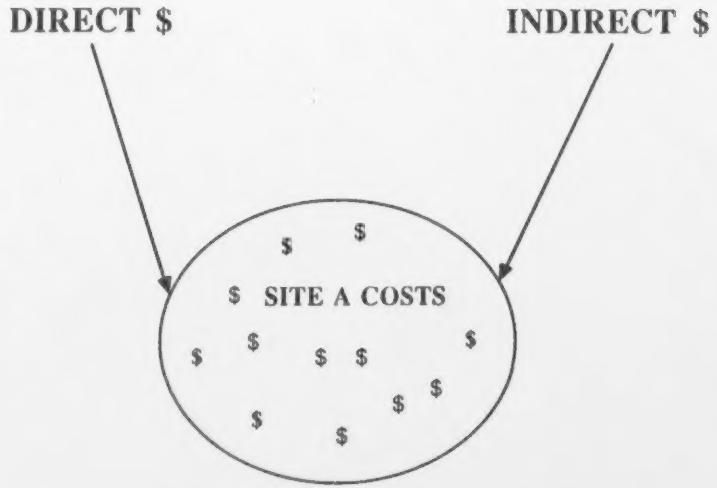
*What are Indirect Costs?*
*How will EPA Manage Indirect Costs Under SARA?*

**CERCLA, as amended by SARA, provides for cost recovery of all expenditures for enforcement, removal or remedial action**

# EPA SPENDS MONEY (INCURS EXPENSES) TO CLEAN UP SUPERFUND SITES


EFFORTS
COSTS
SITES
EPA
$
SITE A
SITE B
SITE C
SITE D
OTHER SITES

# THESE EXPENDITURES INCLUDE BOTH DIRECT AND INDIRECT COSTS


DIRECT $
INDIRECT $
$ SITE A COSTS
$
$
$
$
$
$
$
$
$
$
$
$

# DIRECT COSTS . . .

**ARE THOSE COSTS THAT CAN BE IDENTIFIED READILY BY SITE SUCH AS:**

SALARIES (from time sheets)

TRAVEL (from travel vouchers)

CONTRACTS (from invoices)

FOR EXAMPLE, CLEAN-M-UP INC'S BILL FOR EXCAVATING CONTAMINATED SOIL AT NPL SITE A IS A DIRECT COST.

SO IS OSC SAM SMITH'S TIME SPENT COORDINATING THE CLEAN-UP AT THAT SITE.

## INDIRECT COSTS ...

- Do not relate to a specific site;
- Relate as a whole to all sites;
- Examples include:
    - Administrative management;
    - Program management.

# THE PRICE OF A BAR OF SOAP INCLUDES INDIRECT COSTS

SOAP

**PRICE = $.75**

**DIRECT COST**

COST OF SOAP FROM FREDERICKS BROTHERS SOAP CO. =$.35

**INDIRECT COST**

EMPLOYEE SALARIES
SHIPPING
UTILITIES
BUILDING
HEADQUARTERS GENERAL AND ADMINISTRATIVE =$.40
ADVERTISING
WAREHOUSING
INTEREST ON BORROWED FUNDS
EQUIPMENT
PROFIT

# INDIRECT COSTS

| | |
|---|---|
| EMPLOYEE SALARIES | .12 |
| SHIPPING | .01 |
| UTILITIES | .01 |
| BUILDING | .08 |
| HEADQUARTERS GENERAL AND ADMINISTRATIVE | .04 |
| ADVERTISING | .04 |
| WAREHOUSING | .02 |
| INTEREST ON BORROWED FUNDS | .03 |
| EQUIPMENT | .01 |
| PROFIT | .04 |
| **TOTAL** | **.40** |

# WHAT ARE EPA'S DIRECT AND INDIRECT COST AT SITE A?

SITE A

**DIRECT COSTS :**

CONTRACTOR COSTS ASSOCIATED WITH THE CLEAN-UP AT SITE A

SALARIES OF EPA EMPLOYEES DEVOTED EXCLUSIVELY TO SITE A

TRAVEL TO SITE A

EQUIPMENT COSTS DEVOTED EXCLUSIVELY TO SITE A

**INDIRECT COSTS:**

HEADQUARTERS ADMINISTRATIVE MANAGEMENT

OSWER PROGRAM MANAGEMENT

REGIONAL ADMINISTRATION

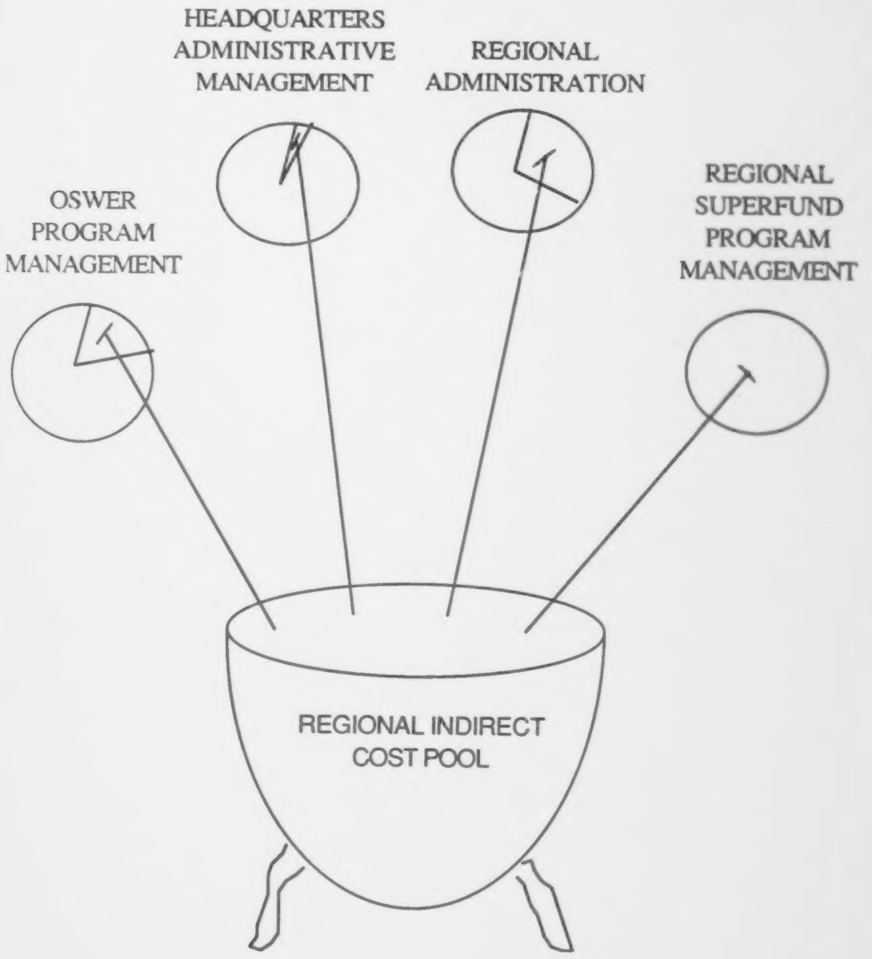
REGIONAL SUPERFUND PROGRAM MANAGEMENT

# EXAMPLES OF EPA'S INDIRECT COSTS

- HEADQUARTERS ADMINISTRATIVE MANAGEMENT
  - Financial Management
  - Facilities Management
  - Personnel
  - Procurement
- OSWER PROGRAM MANAGEMENT
  - Assistant Administrator's Office
  - Resource Management
- REGIONAL ADMINISTRATION
  - Regional Support
- REGIONAL SUPERFUND PROGRAM MANAGEMENT
  - All Non-Site-Specific Superfund Program Costs

# HOW ARE THESE INDIRECT COSTS DISTRIBUTED?

## WE CREATE A REGIONAL POOL OF SUPERFUND INDIRECT COSTS



HEADQUARTERS
ADMINISTRATIVE
MANAGEMENT

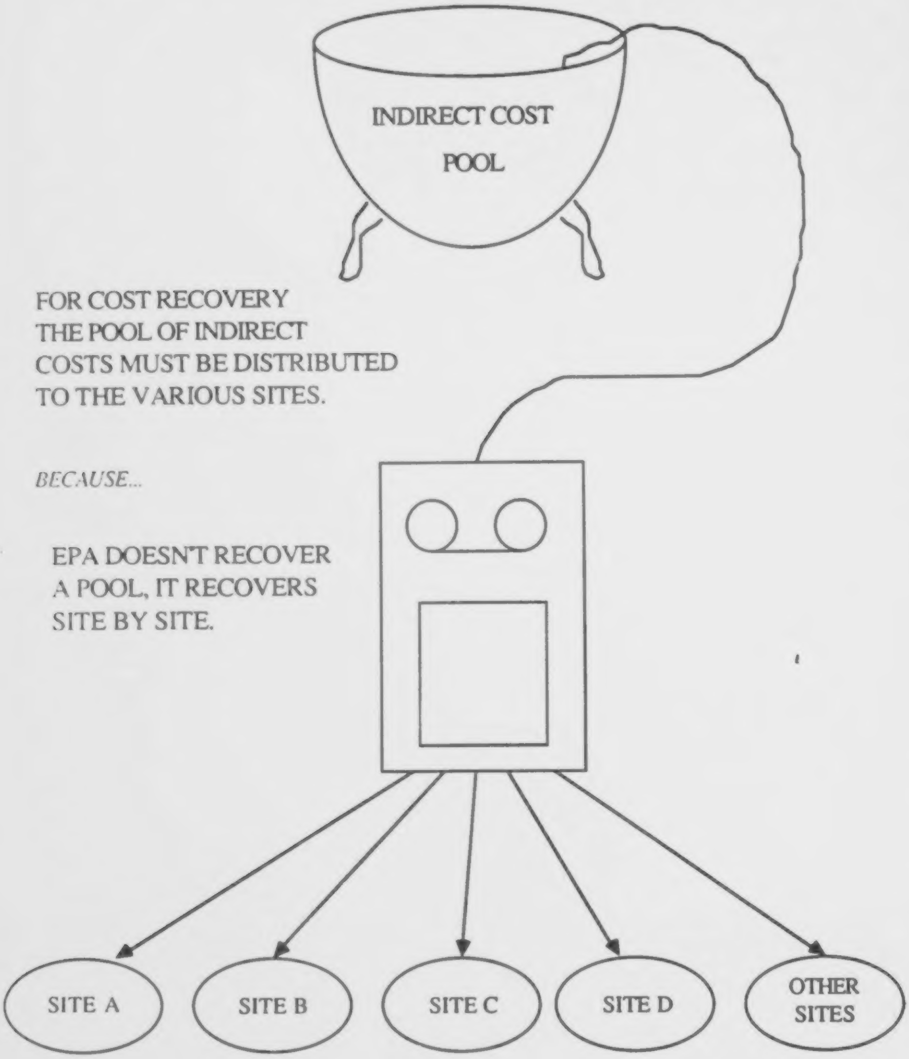
REGIONAL
ADMINISTRATION

OSWER
PROGRAM
MANAGEMENT

REGIONAL
SUPERFUND
PROGRAM
MANAGEMENT

REGIONAL INDIRECT
COST POOL

# THE OBJECTIVE IS TO ALLOCATE THE POOL OF INDIRECT COSTS TO THE SITES


INDIRECT COST
POOL
SITE A
SITE B
SITE C
SITE D
OTHER
SITES

FOR COST RECOVERY
THE POOL OF INDIRECT
COSTS MUST BE DISTRIBUTED
TO THE VARIOUS SITES.

*BECAUSE...*

EPA DOESN'T RECOVER
A POOL, IT RECOVERS
SITE BY SITE.

# AT EPA WE ALLOCATE COSTS USING STAFF HOURS

FOR EXAMPLE:

INDIRECT COST POOL TOTAL = **$1,000,000**

REGIONAL SUPERFUND PROGRAM HOURS = **20,000**

RATE OF ALLOCATION:

$1,000,000/20,000 HOURS = **$50/HR.**

# EPA RECOVERS INDIRECT COSTS SITE-BY-SITE

| | SITE-SPECIFIC HOURS | | RATE | | |
|---|---|---|---|---|---|
| SITE A: | 3,000 | X | $50 | = | $150,000 |
| SITE B: | 1,000 | X | 50 | = | 50,000 |
| SITE C: | 1,500 | X | 50 | = | 75,000 |
| SITE D: | 1,000 | X | 50 | = | 50,000 |
| TOTAL: | 6,500 | | | | $325,000 |

# INDIRECT COSTS UNDER SARA

## WHAT CHANGES ARE IN STORE?

## UNDER THE CERCLA MODEL:

THE POOL WAS NOT ALLOCATED ENTIRELY TO SITES

SOME NON-SITE SUPERFUND COSTS WERE NOT INCLUDED IN THE MODEL

# THE POOL WAS NOT ALLOCATED ENTIRELY TO SITES:

POOL = $1,000,000

TOTAL SUPERFUND PROGRAM HOURS = 20,000

RATE = $50

TOTAL SITE SPECIFIC HOURS = 6,500

RECOVERED = $325,000

# THE INDIRECT COST POOL EXCLUDED:

- SUPERFUND RESEARCH AND DEVELOPMENT
- COSTS CHARGED TO SITES WITHOUT SITE NUMBERS (ZZ)
- NON-SITE SPECIFIC EQUIPMENT COSTS

# PROPOSED CHANGES TO THE MODEL INCLUDE:

Allocating entire pool to sites.

Developing a rate based upon a percentage of the direct site costs

Include previously omitted items:

Superfund Research & Development.
Costs charged to sites without site numbers (ZZ).
Non-site specific equipment costs.

# IMPLEMENTING THESE CHANGES WILL INVOLVE:

1. INDIRECT COST ISSUE PAPER.
2. REVISED INDIRECT COST RATES FOR FY 1987.
3. TRAINING PROGRAM FOR REGIONS AND PROGRAM.
4. NEW INDIRECT COST MANUAL (STAND ALONE DOCUMENT).

Mr. SKAGGS. Would you explain the current status of the agency's review of the Department of Energy's nuclear weapons complex which contains some of the most contaminated areas in the country for inclusion on the national priority list?

Mr. PORTER. You are talking about the Rocky Flats facility?

Mr. SKAGGS. Yes, and many others around the country. Is there a generic approach to that problem in general and then the Rocky Flats plant specifically?

Mr. PORTER. Yes, there is a generic approach. We have some 40 or so Federal facilities that are now on the national priority list. We have 50 to 70 more that will be proposed later this summer.

We are basically going through a docket of Federal facilities. There are 1,095 Federal facilities on a docket which is somewhat similar to this 29,000 inventory that I mentioned for all sites. We have about 1,000 facilities on that Federal facilities docket.

We are subjecting those to the same approach of doing a preliminary assessment, of site inspection, and scoring on the hazardous ranking system. If they score above the HRS cutoff score they in fact become a Superfund site.

Most of the major Federal facilities like DOE facilities, I think it is fair to say the 12 or 14 really large ones, will in fact be Superfund sites. Some are already on the Superfund list, but Hanford and some of the others are in the process now to be put on the Superfund list.

Mr. SKAGGS. What is the timetable for those that have not yet had a ruling made?

Mr. PORTER. I would have to check on that, Mr. Skaggs. I don't want to misspeak on that, but there are some more coming out soon, and I could give you specifics on that later.

Early fall is what I am told by the staff here.

Mr. SKAGGS. Without trying to box you in too much, you would anticipate that the major areas of contamination within the DOE complex would likely be included, then, by this fall?

Mr. PORTER. That is correct.

Mr. SKAGGS. Related to that, again, a general question about your approach to citizen involvement in the review of assessments and cleanup plans in general and, in particular, I understand there is a rulemaking pending or similar that would not permit the assistance grants for citizen review to be made through units of local government. I wonder if you could address yourself to that?

Mr. PORTER. The technical assistance grants?

Mr. SKAGGS. Correct.

Mr. PORTER. We have an interim final rule we are operating under now for the technical assistance grants, and we will be doing a final rule shortly. The interim final rule says that we will give grants to local groups who are incorporated for the purpose of dealing with that site. So, we will not normally, for example, give it to a city or municipality, but to a group of people who are near the site and who are affected by the site economically or environmentally. Those will be the ones.

We have some 38 applications right now from groups that have come in and said we are such a group and would like to receive the $50,000 grant to hire our own technical expert to review what you are doing.

But we have read the term "individuals" in the statute and that is certainly open to discussion with respect to the final rule to give the money to groups that are involved directly at the site as opposed to the City of Boulder or the City of Denver or some other such unit.

Mr. **Skaggs**. I take it, then, your reading of the interim rule does not proscribe a grant to a unit or a consortium of local governments?

Mr. **Porter**. Yes, I think—I have to think about that statement. I think that is right, yes.

Mr. **Skaggs**. And you would anticipate that the final rule would leave flexibility for appropriate cases for a grant to go to one or a consortium of local governments?

Mr. **Porter**. Well, it is certainly possible, Mr. Skaggs. We got a lot of comment on this approach so far, and I want to stay in touch with you and others on this, because we have some unhappy people out there right now.

Mr. **Skaggs**. Well, some of them are in my area.

Mr. **Porter**. Yes, some are probably in your district.

Mr. **Skaggs**. Let me urge you—I understand that the preference should be to groups that may be organized with a site specifically in mind, but there are just simply going to be some of these, I think, in which either a single or a combination of local governmental units is going to provide the best vehicle for citizen involvement, and I hope you will be flexible on that.

Mr. **Porter**. We certainly will.

Mr. **Skaggs**. Thank you, Mr. Chairman.

Mr. **Nowak**. Thank you very much, Mr. Skaggs.

We will turn now to Mr. Molinari from New York for any questions he may wish to ask at this time.

Mr. **Molinari**. Mr. Porter, can you tell me how your implementation of Superfund cleanup interrelates with the National Enforcement Investigative Center and their investigators?

Mr. **Porter**. I think I would like to have my enforcement people answer that, if you don't mind, Mr. Molinari.

Mr. **Molinari**. Okay.

Mr. **Liefer**. The National Enforcement Investigation Center is an arm of the Office of Enforcement and Compliance Monitoring. It is a technical support office. It provides technical support on an as-needed basis. What it often specializes in is discovering information regarding potentially responsible parties, who the PRP's are and to what extent they are responsible at individual sites.

Mr. **Molinari**. As I understand it, originally, that was your laboratory enforcement wing, and, then, subsequently, Congress changed it to provide you with investigators who would go out in the field and do the workup on a case before you proceeded against them. Is that accurate?

Mr. **Liefer**. Yes. It has expanded into an investigatory part of the agency both on the civil and the criminal side.

Mr. **Molinari**. I had occasion to see them in operation. I was very much impressed by them in a serious matter in my own area. As a consequence, I was very interested in what they were doing and their professionalism.

I also learned that, despite the positive and somewhat optimistic report that Mr. Porter gave us here today, that they cannot keep up with the work load, and there are some 100 to 150 cases a year that they simply cannot handle, because they are overloaded. They would refer those to the FBI, and the FBI generally takes the position that it is beyond their scope of expertise so that my reading of it and my understanding of it is that we have somewhere around 100 and maybe as many as 150 cases that are falling through the cracks and not being followed up because of lack of personnel.

Mr. LIEFER. Well, I think there probably is more work than can be easily handled. NEIC has rapidly expanded its criminal investigation work force. In the last three years, it has grown from practically nothing to a fairly sizable unit.

Mr. MOLINARI. That doesn't comfort me at all. What I am trying to find out is what we need in the way of personnel to do the job and get those out there who are guilty parties.

So, what I am addressing, really, is not how much they have grown and how rapidly they have grown but where they are today, and is it a fact that there are responsible parties out there that are going scot free because we don't have the investigative personnel to be able to do the proper workups?

Mr. LIEFER. I don't think it is true on the civil side. Whether there are criminal tips that we don't have enough investigators to follow up on I just don't know offhand. You are asking me whether it is true, and I just don't know. I would be glad to provide that information for the record.

On the civil side, we have investigators in each of the regions. The NEIC is merely out there to supplement those investigations, and I think we are keeping up very well on our responsible party searches across the country.

Mr. MOLINARI. I have some figures here that show—I believe these are an annual figure for last year. There were 1,137 leads investigated, 160 of which were fully investigated, 93 by the Department of Justice and 67 by NEIC. Then there was a balance of 977 of which 510 were found not viable, and 467 were unable to be followed up and were referred back for civil and administrative enforcement and basically left unattended.

So, it is my information that they do a very good job, but they are severaly shortstaffed. They need at least 50 more investigators and at least 25 more technicians. In fact, I tried to offer an amendment this year, but I couldn't get a rule that would permit me to do it.

It seems to me that if the information I am getting is accurate, then, obviously, it has to be backed up, that kind of request, by your offices, and there has to be, certainly, an admission that the problem exists. Otherwise, if we are going to try to beef up the forces where needed and go out and get the guilty parties, we are not going to be able to do the job.

Mr. LIEFER. I think if valid, criminal leads have not been followed up, then I think we probably need more resources to do the job.

Mr. MOLINARI. But you are saying if. I am asking you whether that be the case or not.

Mr. LIEFER. I don't know.

Mr. MOLINARI. Mr. Porter?

Mr. PORTER. Mr. Molinari, I will certainly look into that, with respect to the facts you have mentioned and, with respect to the budget. We are spending about $1.6 billion a year in this program, and we are on track, to spend essentially all the authorized money.

There are a lot of demands on the program. For example, in the emergency removal program, I am under a lot of pressure to put more money in that. It is a good program, it is working well, et cetera.

We are very interested in enforcement. I agree with you that NEIC does an outstanding job. We will take a look at that, and I will talk to the head of NEIC to see what in fact some of these issues are.

But let me just say that there is a lot of pressure on these funds.

Mr. MOLINARI. I understand that. I understand the problem you have in financial pressures.

I have one constant, nagging problem that I have dealt with in looking at Superfund, and that is that we spend a great deal of money, billions and billions of dollars, and we will continue to spend a great deal of money on cleanup, but we don't spend enough money trying to prevent Superfund sites from arising. That, to me, is a major tragedy.

I don't know why our priorities are what they are. It seems to me it would make a lot more sense that we would put in place personnel with expertise and training to go out and find out what is happening out there and catch them in the beginning, identify those who are out there who abuse the environment and stop Superfund sites, try to prevent them from occuring in the first place.

It is a heck of a lot more cost effective to do it that way and to prosecute these people when you get them in the early stages than it is to permit them to continue dumping until they leave and then the situation becomes apparent, and then there is the lengthy, arduous process of finding out who is involved and how you collect.

I think that is an area where we have been very negligent, Congress as well.

Mr. PORTER. Mr. Molinari, can I comment on that?

Mr. MOLINARI. I wish you would.

Mr. PORTER. I think that is an excellent point. We do have about $250 million a year that we are spending in the RCRA program, the Resource Conservation and Recovery Act, which, of course, is geared to that. We are working through a lot of those provisions.

For example, on August 8, we will be putting out some new regulations with respect to banning a lot of chemicals from land disposal at all without treatment. I have about 500 enforcement people in the RCRA program working those issues.

I would agree with you in the sense that I think the Congress and the country does need to be shifting the fly wheel somewhat over time to waste reduction, number one, waste minimization but, in addition, strong enforcement of the existing laws. I think we have made some real progress with our manifest systems and our other rules, but you are absolutely right that to prevent these problems in the first place is infinitely more cost effective than a $50 million cleanup later. We will have to have more dialogue on that later.

Mr. **Molinari**. I think maybe you and I will talk about it at a future date.

Mr. **Porter**. Okay, good.

Mr. **Molinari**. Thank you.

Thank you, Mr. Chairman.

Mr. **Nowak**. Thank you, Mr. Molinari.

We now turn to Mr. Visclosky from Indiana.

Mr. **Visclosky**. Mr. Chairman, thank you very much.

I would like to thank the gentlemen at the table for making their time available. As coincidence would have it, I will be meeting with some of the people from Region V tomorrow in Gary, Indiana regarding a number of sites.

I just have a few questions. They do tend to be parochial, but I would appreciate any comments that you might have.

Timing is critical in Gary, Indiana. We have a number of sites that have been identified—MIDCO II, MIDCO I, and 9th Avenue, for example. My first question is, on all three of these sites that have been identified and classified as Superfund sites, remedial investigation and feasibility enforcement studies have either been completed or are anticipated to be completed by the fall.

My question is, what is the timing thereafter as far as public comment, final design, and closure or cleanup?

Mr. **Porter**. Mr. Visclosky, I don't have the exact timing there. I can certainly supply MIDCO II, MIDCO I, and 9th Avenue later. I have looked into those sites somewhat, but, as you indicated, they are all coming down the home stretch as far as the basic decisions.

There then is a several week public comment period. We then have to respond to those public comments. This whole process is a two- or three-month process. We would sign the record of decision for the site prior to performing the design engineering and site cleanup. Then we would conduct the design engineering and actual cleanup which, depending on the complexity and what the remedies are—and I am not sure what the remedies would be in those cases—could be anywhere from a year or two to longer.

We can take a look at moving as rapidly as we can on those. We are trying to speed that up. We are trying to stop the down time between various phases, as we finish a record of decision, for example, to move into design engineering as fast as we can and move into construction.

So, I will be happy to look into those.

Mr. **Visclosky**. I would appreciate it.

Mr. **Cannon**. Congressman, I can add that for MIDCO I, I think the remedial investigation has been finished. The feasibility study is coming to a close projected by the end of August or early September, and that would suggest to me that there will be probably a public meeting or hearing on the proposed remedy sometime in September of this year if that schedule holds. At MIDCO II, apparently, there has just recently been a settlement with the PRP's to conduct the RI/FS, and I don't know what the schedule projected for that is, but we can certainly supply that.

Mr. **Visclosky**. I would appreciate that.

[The following was received from Cannon:]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

Subject: Follow-up to the Issues Paper on the Midco I and II Sites, Gary, Indiana

FROM: Michelle Roddy, Regional Coordinator
Compliance Branch

TO: Lynn Pirozzoli, Special Assistant
Assistant Administrators Office

The following is a schedule of events for the Midco I and II sites in Gary, Indiana. This is intended as a follow-up to the July 7, 1988 testimony before the Sub-committee on Water Resources of the House Public Works and Transportation Committee.

Remedial Investigation completed - March 21, 1988

Draft Feasibility Study completed - May 30, 1988

Final Feasibility Study - Sept. 15, 1988

Proposed Plan - Nov. 21, 1988

Public Comment Period - Dec. 1, 1988 - Jan. 1, 1988

Record of Decision signature - 2nd Quarter FY 1989

Special Notice Issuance to PRPs - Dec. 1, 1988

Conclusion of RD/RA negotiations (assuming 120 day moratorium) - Mar. 1, 1989

Mr. VISCLOSKY. My question really gets down to one of timing and also cooperation from people such as myself and our local communities. The MIDCO II site is adjacent to the Gary Airport which was sited in a recent FAA study as the best site out of 15 studied for future development as the third major airport in the Chicago metropolitan area.

On seven criteria, Gary ranked very, very high with the exception of one, and that was environmental concerns, and MIDCO II was obviously high on that list.

My second question really is, what are those types of things that the local communities, city officials, county officials, the State can do to help you move the process along?

Mr. PORTER. I think there is a lot they can do. I think one of the things is we need help in, for example, local permits in some cases, local kinds of facilitation. We need people to get their comments in briskly and to work with us in terms of answering those comments.

I have seen some very good interactions around the country from, for example, city councilmen and people like that in helping us facilitate some of these cleanups. Sometimes, there are access issues. Sometimes, they are local ordinance issues that need to be dealt with.

So, I think there are some mechanical things that could be done to expedite some of these. The important thing, though, is to just work with us on the schedule to get comments in briskly, to work through some of the issues that come up with respect to implementation such as access, etc. There is a lot they can do, and we would be happy to work with them.

Mr. VISCLOSKY. So, in this case, if it is a question of people being tardy with comments or questions of permits, our office and other local officials could cooperate as long as you give us notice that you are having problems in certain areas to again move the process along.

Mr. PORTER. Yes. One of the things I tell people around the country is the world doesn't have to stop because a Superfund cleanup is going on. I don't know about that site particularly, but there have been sites where other activities have gone on as we cleaned up a site. This necessarily did not take place right on top of what we are doing, but there may be activities that could go on around the fringes of a site or other activities with respect to other developments as work moves ahead.

I don't know if that applies at all in this case or not. One can look at the other activities that have to go on in parallel with the Superfund cleanup, because we do have that happening in some cases.

Mr. VISCLOSKY. And would it be important to you to know what the anticipated use of the property or the surrounding area might be in the future?

Mr. PORTER. Very definitely.

Mr. VISCLOSKY. And that would be one of the purposes of our meeting with Region V tomorrow.

Mr. PORTER. Very definitely.

Mr. VISCLOSKY. I have one final question, and that is there are also several sites either adjacent to the airport or nearby that have not been designated as Superfund sites but are potential problems.

What should our approach be as a community in relationship to EPA to make sure that we have a thorough investigation of these sites so that a year or year and a half from now we don't have any unpleasant surprises and delays?

Mr. **Porter**. I think one thing that needs to be done is to be sure they are in our inventory. I mentioned these 29,000 sites that are in an inventory in the country. We then work through 3,000 of those a year doing preliminary assessments. I don't know if those are in the inventory, but, if not, they should be so that we could go ahead.

Frequently, about 20 times out of 21 roughly, we don't put things on the Superfund list. We look at a site, we say it is not that serious or could be handled under a State law or could be handled under removal authority or something else.

So, it is important to get through that first cut which is pretty straightforward to say looking at the paperwork on that site, looking at the site in the field, what in fact is the problem. If it is not potentially a Superfund site, then the cleanup or whatever has to be done can usually be done much more expeditiously.

If it in fact is a Superfund site, given the various factors in the law, there is usually a fairly lengthy period to study those factors.

Mr. **Visclosky**. Mr. Porter, thank you very much.

Mr. Chairman, thank you. I yield back my time.

Mr. **Nowak**. Thank you very much.

I might just mention to all the members that we will attempt to keep to the five minute rule here. Nobody has exceeded it grossly so far. Then, any other questions you may have, we will have a second round. Additionally, we would hold the record open for any specific questions you wish to submit in writing to Mr. Porter.

Let me now turn to Mr. Packard from California.

Mr. **Packard**. Thank you, Mr. Chairman.

Mr. Porter, in the original stages of this bill when it was being discussed here in the committee, the funding level was somewhat arbitrary. The $8.5 billion was what we settled on, but there were those who felt that we were overfunding it, that we wouldn't be able to spend that much in the limited time of the authorization, and others felt it was not enough.

Are the funding levels a constraint in moving forward as rapidly as we are able to, or do you have adequate funds?

Mr. **Porter**. Mr. Packard, I think they are about right. It is a very big program to manage and a very complex program. I have 3,000 people working in the program not to mention the Corps of Engineers and the States and a lot of contractors.

I would say we are managing about all we can. I am not saying we couldn't manage somewhat more, but we have 850 sites going now.

Certainly, you can always use a little more money, I suppose, but I think it is a manageable program, just barely, and I am not sure that having a lot more money would make a lot of difference. The constraint seems to be running these sites through this fairly complex process of analysis. These are pretty difficult problems technically and otherwise, and that has not been a huge constraint.

We certainly have some, as Mr. Molinari was getting at, some tugging and hauling with respect to where we put the money, and I think that is going to continue to be an issue. We are trying to find efficiencies where we perhaps have put more money one place and could put some more in a better place. However, I think it is in the right ball park.

Mr. PACKARD. How far along are we on the identifying and prioritizing of the sites across the country? Are we on schedule? Are we adding to those with new sites being identified faster than we are cleaning up already identified sites? Is the list on the priority list becoming greater, or are we making progress?

Mr. PORTER. We are making progress, but I have to be truthful in the sense of saying that we are still adding sites faster than they are coming off. Right now, we are in the process of adding roughly 100 sites a year to the Superfund list based on this whittling down process.

I might say we are on schedule. We met the statutory deadline of the 4,700 preliminary assessments required by law in the first year and a half, so we are on schedule in the mechanical sense. But we are adding about 100 sites a year to the national priority list. We are cleaning up or getting off the list about 30 to 50.

Now, these are going to tend to get more in synch, but it seems to be fairly soon, I would hope that we wouldn't just have a steadily expanding list. I think the other way I would say it is that based on the 29,000 sites in our inventory and the 3,000 or so more coming in each year, I think we are in fact identifying the worst sites.

There are some people who say there are probably hundreds of thousands of sites out there. Well, perhaps, but there are also many other ways to handle a lot of those sites, and I think the system is working pretty well with the States coming in, particularly, with their priority sites. We whittle down from there, and I think we are doing a pretty good job of prioritizing.

Mr. STANGELAND. Would the gentleman yield briefly?

Mr. PACKARD. I would be happy to yield.

Mr. STANGELAND. I am kind of curious. You say you review 3,000 sites a year and you have 29,000 there. Is there some way you could determine in an initial determination which of those 29,000 you will pick 3 from so that you don't have some horrible site out there waiting 8 years before you get to it?

Mr. PORTER. Mr. Stangeland, we are doing some of that. For example, that is an important point, because your first decision is which 3,000 do you look at. What we are trying to do, for example, is this next year, we are going to take about 1,000 former hazardous waste operating systems. We thought that is a good place to look. These are people who are closing under RCRA. A lot of the RCRA facilities, rather than get the permit needed, are closing.

So, what we are going to be doing is looking at a lot of those former RCRA or hazardous waste management sites, pulling those out of the system, again, on a kind of priority basis. But we very much are trying to do that to say which 3,000 and then from the 3,000 whittle down.

Mr. PACKARD. Of those 3,000 that you are evaluating each year, have you determined how many of those are newly created, or are almost all of them long-standing cleanup sites?

Mr. **Porter**. That is an interesting question, Mr. Packard. I haven't thought of it quite in those terms, and I don't have any real firm statistics to give you, but I think, in general, they tend to be older facilities.

I was looking at some the other day that were closed in 1952 or 1957 or 1965 or 1971. We certainly have some that were closed recently, but I think, in general—and I will double check my facts on this—that they tend to be things which were operating some time in the past.

Mr. **Packard**. I think it relates back to Mr. Molinari's question, and that is, are we adding to by not monitoring the creation of new hazardous waste sites faster than we are picking up the old ones that have been there a long time?

One last question, Mr. Chairman, if I may. Are the sites fairly well distributed, those that we are now entering into cleanup operations. Are they fairly well distributed among the States, or are we finding them concentrated more in some States than others, thus perhaps creating a problem for the States to contribute their portion, or are we finding States having difficulty coming up with their fair share?

Mr. **Porter**. Mr. Packard, I think there is a maldistribution. I think the sites tend to be in the more industrial States. Your State has a number of sites. New Jersey, New York, Texas, Louisiana, Michigan, Ohio, et cetera—probably some 10 or so States—I don't know the exact numbers, but they certainly have a large majority of the Superfund sites, because they tend to be in the more industrial areas.

Mr. **Packard**. Do those few States have difficulty coming up with their portion of the money?

Mr. **Porter**. I think, in general—again, don't hold me to this explicitly—but I think, in general, that those highly industrialized States that have the most sites have tended to find the money. We have had more difficulty with some of the States which aren't as industrialized who have had more difficulty even in the few sites in their State coming up with $1 or $2 or $3 million in matching funds on those sites.

Mr. **Packard**. So, States cannot be accused of delaying the cleanup process by virtue of their lack of moneys?

Mr. **Porter**. No. Actually, what is happening—one point I might want to interject at this time is that most of the cleanup in this country, not necessarily the worst sites, but most of the cleanup is being done by the States.

New York State has a large inventory. New Jersey has a large inventory and Minnesota and others. So, there is a lot of cleanup going on in the States directly by the States.

Then there is some cooperative cleanup with us and the States, but it is a real partnership arrangement, and I think they have not been a constraint.

Mr. **Packard**. Thank you, Mr. Chairman.

Mr. **Nowak**. Thank you very much.

We will now turn to Ms. Slaughter from New York.

Ms. **Slaughter**. Thank you, Mr. Chairman.

Good morning, gentlemen.

I share my colleagues' interest in what you are doing throughout the country, but since one of your sites is in my district, I have a consuming interest in that. Are you familiar with the Jones Chemical site in Livingston County, New York?

Mr. PORTER. No, I am afraid, Ms. Slaughter, I am not. We could certainly get information on it.

Ms. SLAUGHTER. Let me just ask a couple of questions, then, on the process.

Mr. PORTER. Okay.

Ms. SLAUGHTER. Jones Chemical has been manufacturing chemicals there for about 50 years now. In 1986, New York State found in some on-site wells numbers of dangerous chemicals in those wells, and the whole 10-acre site of Jones Chemical within 1,500 feet of the village of Caladonia's well.

Now, Jones claims that the chemicals are not theirs. My question is, do you have to wait around to try to settle that in some way before you begin the cleanup of what could be very devastating or may already be? That is one of the questions I have. What extensive studies have been done on the drinking water?

Mr. PORTER. I am not sure of the exact facts in that case, as I say, but as a general matter, we don't have to wait. We have the funding to move ahead on a site if we think there is an imminent problem. We can either move under our emergency authority if it is that imminent, or we can say while we sort out who is culpable, we are going to move ahead with the studies and the cleanup and so forth and bill later the people that we find ultimately are involved.

I could find out precisely for that site, but that is our general process.

Ms. SLAUGHTER. I would appreciate it if you would, Mr. Porter, and also if you could give me some idea of what you then do to require that this not happen in the future since this is a working chemical company. I would appreciate some further information on that if you could provide it.

Mr. PORTER. We certainly will, Ms. Slaughter.

Ms. SLAUGHTER. Thank you.

[The following was received from E.P.A.:]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 12 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Honorable Louise Slaughter
House of Representatives
Washington, D.C. 20515

Dear Ms. Slaughter:

At a recent hearing, you asked about the status of the Jones Chemical site in New York. Specifically, you requested information on the status of EPA activities at the site and you inquired as to whether EPA was doing any extensive ground water studies at the site.

The Jones Chemical, New York site was proposed to the National Priorities List (NPL) in June, 1988. Contaminated media at the site include soils and ground water. EPA is taking comment on its proposal to finalize Jones Chemical on the NPL. At present, EPA is monitoring several wells drilled by the State's Department of Environmental Conservation and the Potentially Responsible Parties (PRPs).

Because it was so recently proposed to the NPL, remedial work at the site has not yet begun. EPA's Regional office in New York is currently negotiating with PRPs to conduct further ground water studies as part of a Remedial Investigation/Feasibility Study at the site. The Region is currently considering actions to address contamination at the site.

We look forward to a swift, efficient remediation of the site which includes citizen, State, and responsible party participation. Please contact my office if you have any further questions.

Sincerely,

J. Winston Porter
Assistant Administrator

Mr. NOWAK. Thank you.

Perhaps, also, this would be a good time to explain to the committee how—as Ms. Slaughter mentioned, there is a problem with drinking water—how you are coordinated with the other agencies that are out there and RCRA and so forth and the Safe Drinking Water Act and the Clean Water Act and how that interaction would play. Second, I wonder if you could respond to Ms. Slaughter very quickly by contacting the New York Department of Environmental Conservation, whom, I assume, has evaluated that site near Rochester.

Mr. PORTER. On your first point, Mr. Chairman, with respect to the Safe Drinking Water Act, shall I address that?

Mr. NOWAK. Yes, please.

Mr. PORTER. What we do in the Superfund program is we have indicated that the cleanup levels at a site in which drinking water is the issue, that is present or potential drinking water, we have adopted maximum contaminant level goals, MCL's, as the legally applicable standard as put forth by the Safe Drinking Water Act. So, we use those just like we do for the other 200 million people in the country that are affected by those standards.

As you may know, there was quite a debate on that, and the debate is not yet totally over about so-called MCLG's, that is, the goals under the Safe Drinking Water Act which are not legally applicable, but they are goals to be strived for where you can. These are, in fact, zero in some cases.

What we have said is we will consider those MCLG's as Superfund told us to in certain cases, and the cases we have defined are whether we have multiple contaminants or some particular pathways that make it a special case. However, in general, we feel this program should adopt as its drinking water goals the same goals as the other people who are affected in this country by drinking water.

Mr. NOWAK. The second part of the question, getting the information, relates, I guess, to one of the things we mentioned earlier, how EPA works with the States in the identification process of a particular site and how the State input and the remedies are decided upon. This may be a typical case that is in that process now, and we certainly appreciate that additional information on this site.

Ms. Slaughter, has the State been in contact with you on this site?

Ms. SLAUGHTER. No, only constituents.

Mr. PORTER. We could find out about that.

I might say one more thing. The State frequently actually does the preliminary assessment. I mentioned these 3,000 preliminary assessments. We give them contract money, and, frequently, they actually do the preliminary assessment.

However, I will check both with our region as well as the State.

Mr. NOWAK. Thank you very much.

We now turn to Mr. Gallo from the State of New Jersey.

Mr. GALLO. Thank you, Mr. Chairman.

Congressman Packard, I would like to see some of these sites spread over a greater portion of the States rather than—the State of New Jersey has the dubious distinction of having the most recorded number of Superfund sites in the nation. New Jersey has done a good job of identifying its sites. The current total is 99, soon to be 102.

I agree with your initial remarks concerning the OTA report. I think that if the report was to have had a great deal of meaning, there should have been more of a dialogue between the EPA and OTA investigators as the report was being developed. Then, the report would have had more impact and may have answered some of the questions that were raised.

One very great concern that I have is the length of time it takes to make the preliminary assessment of a site. You say that you are dealing with 3,000 sites a year, however I have seen literally years go by before there is even an on-site inspection.

Is there a mechanism to speed this process up?

Mr. PORTER. Mr. Gallo, we are trying to speed that up. Actually, of the 29,000 sites in our inventory, we have done preliminary assessments at almost 27,000. So, we are not too far behind the curve. We haven't quite caught up with the curve, but we are trying to get people to go ahead and do those.

We are trying to work more closely with the State, prioritize the PAs and get the work done, because some have, in fact, taken too long. We also have a backlog. What we began to discover a year or so ago was that the PA is supposed to be a decision point. At the preliminary assessment, you make a decision to proceed to the field investigation.

We found that what was beginning to happen a year or so ago was that people were not making that decision. They were saying we did a preliminary assessment, let's proceed to the next phase.

We are saying no, we can't handle all those sites. They are not all that bad. You need to make a call, yes or no, does it need to proceed to the next phase?

Historically, it has been that about 2 out of 3 needs to proceed to the next phase, that is, a site inspection. We found that people were not making that admittedly somewhat tough call, but we have to make some kind of prioritization in the program. Generally, people can do that if they think hard at where they are and look at the other sites and determine if this is really one that has any chance of becoming a Superfund site.

Mr. GALLO. During the reauthorization of Superfund, I was very concerned about Congress setting the number of sites to be at certain steps in the clean-up process after a specified time. As the law was written is the figure that we have given you to work with realistic? Or have the requirements made it necessary for EPA to work on the sites that can be cleaned up quickly resulting in the more complicated sites being left by the wayside?

Mr. PORTER. Mr. Gallo, those are all good points, and we are trying to work on all of them.

I would say, first, that the numbers have turned out to be pretty realistic. I mean, they are tough but realitic.

As you know, Lee Thomas and others had quite a bit of dialogue with the committees as we went through this. I think some of the initial numbers that were being talked about were unrealistic. We would have, unfortunately, said well, it is an impossible number, so why worry about it?

Well, I can't say that now. These are not impossible numbers. In fact, on the remedial action starts, the engineering study starts, the preliminary assessment starts, I am sticking my neck out a bit, but I am saying we are going to make those numbers. We are well on track to make them. It has actually given me a very good tool to tell people you have to get a lot of work done at a lot of sites. That was the Congressional intent, to get a lot of work done at a lot of sites.

So, number one is we are going to make it.

Number two, with respect to whether we are just picking the easy work to do some bean counting, that has been of concern. I think the answer again is we are not. We try to watch that very carefully.

For example, we have 175 of these construction starts. We have a list of those. It is actually about 200 or so we are tracking that are candidates for the 175. In looking at those and in looking at our studies, these appear to be real high priority projects. They are not just very simple jobs that people can put in backlog.

Mr. GALLO. Dr. Porter, a concern that I have voiced regularly is that EPA has not cleaned up a single site under the Superfund, to date.

Can you tell us how many sites have been cleaned up?

Mr. PORTER. We have cleaned up about 35 sites to date. I have to define cleanup a little bit.

We have two kinds of cleanups. One kind of cleanup is where we have finished the work at the site, we have actually gone through a process of deleting it or taking it off the national priority list. There are about 32 of those, deleted or in the process, up from the famous 6 in the first five years.

In addition, we have begun counting as a cleanup, sites where you have finished all the work. You are just into long-term monitoring or perhaps long-term treating of the groundwater which may be 10, 15, or 20 years.

We think it is fair to count that as a cleanup. We keep it in a separate category, but there are about 3 in that general cleanup category. As I say, we are planning about 30 to 50 a year right now in terms of ones coming off or being cleaned up in the Superfund context.

In addition, I think it is very important to emphasize that we have done 1,200 removal actions. Many of those are cleanups. They may not have been a total cleanup, but we have done 1,200 where we have gone out to sites and done some kind of short term cleanup where there was an imminent problem.

About a quarter of those were Superfund sites. About three-quarters of those were not Superfund sites.

So, if you want to look at total cleanup, it is 1,200 plus 35.

Mr. GALLO. One more question, Mr. Chairman.

The concern for the serious problems that our defense installations have with contaminants has come to the forefront. Picatinny Arsenal, which is in my district has a history of armament development and munitions.

From what I gather, there has been a great deal of cooperation between DOD and EPA. However, one of the things that has held us up is the development of an informal or formal clean-up agreement. It seems that this is going to go on for another couple of months.

How do you bring these agreements together more quickly? At this particular site, the water supply for two very large communities could be affected.

Mr. **Porter**. Mr. Gallo, let me mention that from two aspects, one from the RCRA or hazardous waste management aspect, and one from the Superfund aspect, because Picatinny involves both.

On the RCRA side where people have a compliance problem, that is, complying with the present laws, that particular base has some problems. We have had some difficulty in negotiating an agreement. The difficulty was primarily in getting nationally understandable and agreeable language between ourselves and DOD. We now have that on all of these issues.

The Federal Facility Compliance Agreement for RCRA is at DOD for signature now. We expect it to be signed in a matter of days. We have settled all the national problems of enforceability, dispute resolution, and other things that were in contention.

In a more general sense, what I have put in place is an elevation process where when we give a basic compliance violation notice, the region will have so many days to negotiate that at the staff level, 30 days or so, another 30 days or so at the regional administrative level, then it comes in to me and, ultimately, Lee Thomas if necessary.

So, we have begun doing this very well. At the Iowa Army ammunition plant where we got stuck in the field, it got to me. I consulted with the Secretary of the Army, and we got it settled.

So, we are trying to, have all the legal boilerplate together, so there is no point in hassling over that and we want to elevate these as soon as we can.

Now, at Picatinny, we also have some Superfund issues. Again, those legal issues have been now resolved with them. So, we will be developing another agreement to handle the Superfund issues, but that should not take very long either.

It has been a long, trying experience, but I think we are now at the point on these Federal facilities that we have all the tools we need, to move ahead and get these agreements in place. I have national agreements with DOE and DOD, and that is a very large percentage of the problem. We are ready to move ahead on those.

Mr. **Gallo**. I want to thank you, Dr. Porter. Obviously, you have a great deal of knowledge in your area of responsibility, and I am pleased that you are there and doing the job.

Mr. **Porter**. Thank you very much.

Mr. **Gallo**. Thank you, Mr. Chairman.

Mr. **Nowak**. Thank you very much.

We will now turn to Congressman Valentine from North Carolina.

Mr. **Valentine**. Thank you, Mr. Chairman.

I have just one question that is maybe an extension of some inquiries made by our colleagues.

Generally speaking and looking at the nation as a whole, how would you characterize the condition or state of local government cooperation?

Mr. PORTER. Well, I think it has been generally good. One thing that has been very helpful around the country is where you have had some leadership from a local councilman or Congressman or State Senator or whatever to help us facilitate with the community groups.

The problem a little bit, Congressman, is that we are kind of getting it from two angles now. We are getting it from the angle of I have a bad site, I want you to clean it up, I want it to be on the Superfund list—that kind of general angle.

On the other hand, we are also getting it from the other side which is this doesn't look all that bad, it is going to decrease property values, why don't you just go home or wherever you came from, et cetera. I have had several meetings in various Congressmen's offices lately on those kinds of issues.

So, it is an interesting balance as people begin to see it is not a totally free ride here. We want the sites cleaned up. At the same time, there is some disruption in the community. People are worried about their property values and other things.

So, we are going to implement the law, but we are now getting it a little bit from the other side, too, which is to say we are not sure that site is all that bad and maybe we can learn to live with it if it impacts property values.

We are going to abide by the law. We are going to go in and work with the local people and clean up these sites. But I did want to let you know that it is kind of a two-pronged approach now.

Mr. VALENTINE. Are you able to say to what extent the discharge of your duties and responsibilities has led you into direct conflict or head on collisions with local governments that you have found in the State or the county? Have you uncovered situations where the local government itself is responsible for some of these problems?

Mr. PORTER. Mr. Valentine, that is a very good point. We have a number of those. Again, I can think of a number of meetings I have had in various Congressional offices lately on that issue where it has come to their attention that the city or the municipality is going to have to pay for part of the cleanup. They, in fact, from washing of their own vehicles or using solvents or whatever have created the problem.

One of these cases was talked about in the OTA report. It is a small town in south Texas where they are the responsible party. We are going to have to deal with them in an enforcement context. It is not a wealthy community, et cetera, but they are involved in causing the problem.

That is creating a source of tension. Some people didn't realize, perhaps, that if you are a PRP or responsible party, you are a responsible party. That includes large chemical companies, smaller companies, as well as municipalities, and that is a source of some tension now.

Mr. VALENTINE. Thank you, Mr. Chairman.

Mr. NOWAK. Thank you.

We will now turn to the patiently waiting Mr. Lightfoot.

Mr. LIGHTFOOT. Thank you, Mr. Chairman.

I have a statement which I would like to make part of the record.

Mr. NOWAK. Without objection, it will be admitted in its totality.

Mr. LIGHTFOOT. Thank you.

[The prepared statement of Mr. Lightfoot follows:]

STATEMENT OF REPRESENTATIVE JIM LIGHTFOOT, JULY 7, 1988

Thank you, Mr. Chairman. I want to join you in welcoming Dr. Porter and thanking him for appearing before the subcommittee this morning.

When Superfund was reauthorized in 1986, some dramatic changes were made in the existing Toxic Waste Cleanup Program. At that time there was hardly any dissension about the need for an extension in the program or the urgency of the problem, but there was some disagreement over what was the most effective and fair way to address it. I for one voted against the legislation because of various concerns I had with it, primarily dealing with taxation and the funding level.

Now that we've had two years to begin implementing the new law, we need to stop and take a look at how it's working and determine whether any interim changes are needed. In that regard, I look forward to hearing Dr. Winston's testimony and reviewing the various issues that concern us all.

Again, thank you Mr. Chairman, and I want to commend you for placing a priority on this issue.

Mr. LIGHTFOOT. Mr. Porter, yesterday and this morning, staff did some checking on a site that is being cleaned up in my district, and I am pleased ~~to~~ report to you that people on both sides of the issue are happy. How is that?

Mr. PORTER. Will you put that in writing?

Mr. LIGHTFOOT. Yes, sir. I will be more than happy to.

Mr. NOWAK. Usually, if that is true, there must be something wrong with the solution.

Mr. LIGHTFOOT. That is probably the thing, Mr. Chairman. Maybe they are going to make a missile site out of it or something. I don't know what they are going to do with it. Anyway, it has moved over a period of years, and people seem to be satisfied with what has been accomplished, as I say, on both sides of the issue.

Due to the drought that is going on in the Midwest now, there is heightened interest in groundwater, and we are starting to see pollutant buildups in areas where we haven't before simply because we don't have the flow to carry it away. There is the old saying that you don't miss the water until the well runs dry. We might add to that that you don't miss it until it is polluted, either.

In terms of your national priority list, how many sites would you say on that list do involve groundwater contamination?

Mr. PORTER. Mr. Lightfoot, I don't know exactly, but it is certainly a majority that involve groundwater contamination. That is probably our biggest single problem.

I think I mentioned that of the 112 or so remedies we have selected since the law was reauthorized, almost 50 of those involve pumping and treating of groundwater, and that doesn't mean the others didn't have groundwater contamination, but it certainly means those 50 did. So, that is one measure.

Mr. LIGHTFOOT. If we understand the OTA report correctly, it basically says that some of the recent EPA research has found that EPA's efforts to characterize groundwater contamination at the Superfund sites may be inadequate. They don't have a proper way to define it.

The apparent reasons—and I quote from the report which says, "low sampling frequency coupled with the generally smaller sampling networks." Could you comment on that?

Mr. PORTER. Mr. Lightfoot, I think there are a number of things I could say about that. First, we are finding it very difficult and very complex to characterize polluted groundwaters. It isn't just a matter of if 10 wells are good, 20 wells must be twice as good. It is very important where you put the wells, the kind of sampling, and so forth.

So, I wouldn't necessarily agree with that, because I think what that implies is that if you do more sampling, you will be a lot smarter.

I have been talking to a lot of hydrologists lately and eminent people at universities about what we really know and what we really do not know on this. It is still a pretty empirical science, meaning that it is a bit of trial and error.

For example, one of the things we are beginning to do in this pumping and treating of groundwater is we are beginning to find that it is better if you think you have to do it to go ahead and start doing it and see what the impact is as opposed to studying it for three or four years; It is very hard, even with the most skilled people, to say exactly what is going to happen when you begin pumping and treating groundwater.

It is somewhat empirical. We don't know exactly what the chemicals are underground. We don't know exactly what strata they are precisely nested in. There are a lot of technical terms like "adsorption" to the soil and so forth.

We are also finding, if I could just go one step further, that as we pump and treat groundwater—our research people are looking into this—is that we may not be able to get down to some of the levels we thought initially. You know, there is an equilibrium that develops in the soil with respect to these chemicals, not at a dangerous level but maybe at a level somewhat above where we would like to be, and you just plateau there for perhaps dozens or hundreds of years. You could pump sort of forever and never get much below that level, because the material is tightly bound to the clays and other things.

We are going to try to characterize groundwaters. It is hard to characterize groundwaters. We are going to be getting a little more empirical in the sense of trying things to see if they improve things as opposed to going the way they were implying, I think, which is you need to study it more.

We are not sure that it wouldn't be better to go ahead and try some things, not in an unstructured way, but after a year or two of study, you may just want to get in there and begin doing things and see by a more trial and error than just necessarily taking more samples.

We spend a huge amount of money in this program in analytical work. I am not sure we don't spend too much in some cases. We are trying to work smarter, not just take more samples.

Mr. LIGHTFOOT. Would that also apply to the movement of chemicals in the soil? In other words, does it go in at point A and show up at B and C without our knowing how it got there? Would the same type of thing apply to that?

Mr. PORTER. That is correct. We have found a number of interesting things. For example, in gas leak spills, one of the things we are beginning to find is that there is more biological degradation than we first suspected. We found gasoline plumes that sit there and shrink, meaning that there are microorganisms attacking them.

That is not the total answer to the problem, but that was kind of interesting. On the other hand, some chemicals aren't attacked much by underground organisms. Some chemicals are much more soluble in water, some are much less soluble. Some adsorb to the clays much more strongly.

The real challenge at a Superfund site is frequently you have this mix of chemicals. To make it even more interesting, it is an unknown mix, because these, by definition, were probably inappropriate disposals. So, you don't really know exactly what you have. There are usually not good records, and that is the reason it is hard to predict ahead of time exactly what is going to happen.

We know quite a bit, about how water moves around. You can model that with mathematical models and computers and all that. But to model how benzene or zylene or toluene move around is much more difficult.

Mr. LIGHTFOOT. Thank you being here this morning, and thank you for your work.

Thank you, Mr. Chairman.

Mr. NOWAK. Thank you.

Mr. Hastert from Illinois.

Mr. HASTERT. Thank you, Mr. Chairman.

You know, one of the things when we are talking about Superfund is we are trying to rectify the sins of the past, so to speak. My question is, how closely do you work with State EPA's to prevent the sins of the future?

For instance, at least in my district right now, we are immediately outside a huge urban area. Of course, you are the target for the next dumping area, whether it is hazardous waste or whether it is just regular garbage. We call it other things today, but, basically, that is what it is.

My concern is when you establish whatever the state of the art happens to be at the time, who determines what is right and what is wrong? It seems like the EPA just kind of turns it over to the State agencies, and everybody has different standards. At least in the case in Illinois, the people who are responsible for the research and making the proposals are the guys putting together the plans.

It seems to me like it is the fox and the chicken coop. Where is the check and balance here?

Mr. PORTER. Well, first, on the RCRA program, that is, the management of hazardous waste, it is a very prescriptive program. The 1984 amendments to RCRA were very prescriptive. We banned certain chemicals from the land. We required double liners in certain kinds of instances. We have a lot of other things that are required.

It is very difficult to get a permit. There are only about 300 operating land disposal facilities in the country now under RCRA, hazardous waste. That part is quite well regulated.

We delegate or we authorize the States to carry out that program, but we also have a review process with them. We give them the money. There are some strings attached in the sense of what they do or don't do. Our regions oversee what they do.

There certainly are problems, but I think on the hazardous waste side, we have a pretty tight net now to deal with that.

On the solid waste side, it is more difficult, because the law is not very prescriptive on garbage or solid waste. We are putting out new landfill regulations. In fact, we have ones that have just cleared internal review that will go out and require much more stringent requirements for landfills, that is, solid waste landfills.

But I think it is fair to say that way the law was constructed, there is a lot of prescription and enforcement on hazardous waste and not too much on solid waste. The problem is you can't really divide the world that way. Things are not that clean cut that this is solid waste and this is hazardous waste. There is a spectrum.

Mr. HASTERT. If I may interrupt for a second, the problem with solid waste is you don't know what is there. It can be paint and it can be all kinds of things that are thrown in a garbage can and put in a truck and dumped on a site. It can be in high quantity, or it can be in very small quantity, but in most of those solid waste dumps, there is an amount of hazardous waste, too.

One of the problems that we see is that a lot of these "disposal sites" today are being put over recharge areas for especially our low level aquifers. That is a concern that we have.

Do you see more input from your agency to State agencies?

Mr. PORTER. Yes, I do, Mr. Hastert. These regulations that are being proposed—in fact, they will be in the Federal Register in a few weeks—are prescriptive with respect to things like location preventing leaks, how you get to those levels.

I think you are going to see a quantum jump pretty quickly on solid waste landfills. Now, the teeth in that, by the way, is that the State has to pick up those regulations within a year and a half. To the extent they don't, then the Federal Government can actually run that program.

There will be much more teeth in that part of the program.

Mr. HASTERT. The second part of my question, if I may be indulged for a couple more minutes, is your relationship with—you know, I have the second largest low level nuclear waste in my district. Of course, you guys don't have to worry about that. It goes to NRC.

What coordination do you have with NRC in making the determinations, especially in areas of groundwater contamination and surface water contamination?

Mr. PORTER. We actually have quite a lot. We may be involved in yours. I am not sure, because we are involved in mixed waste.

There are some waste streams from a lot of Federal facilities, particularly, that are mixed radioactive or hazardous waste or chemical waste. We worked out a protocol and some guidance with the NRC if people have to get a disposal permit, for example, for mixed waste, that is, low level radioactive and chemical, they will need both permits. They will need the NRC license and the RCRA permit.

I don't know if that applies in your case or not, but we are actually quite involved with them where there is a chemical part to it.

Mr. HASTERT. Maybe, without taking any more time of the committee's time here, it is the old Lindsay Light Chemical Company in West Chicago, the Kerr-McGee site now, and I would like to have some more input on that. We would appreciate that.

Mr. PORTER. Certainly. We would be happy to.

Mr. Hastert. Mr. Chairman, thank you.

Mr. Nowak. Thank you very much.

I think, at this point, Mr. Stangeland has a few more questions, and then we can conclude the questions.

First, however, we will take just a 10 minute recess to vote. Then, Mr. Porter, we will hope to have you out for lunch.

Mr. Porter. Thank you very much.

Mr. Nowak. Thank you.

We stand in recess.

[Recess taken.]

Mr. Nowak. The subcommittee will come to order.

We turn now back to Mr. Stangeland for any additional questions he may wish to ask at this time.

Mr. Stangeland. Thank you, Mr. Chairman.

Dr. Porter, I would appreciate it if you could describe in detail what the alternative remedial contract strategy is and how it will achieve its goals of increased competition and savings.

Mr. Porter. Mr. Stangeland, what we have done in the ARCS concept is we are procuring a number of contractors that relate to a particular region as opposed to being national contractors. We procure about three to five contractors for a region of EPA. That region, in turn, can select them on a site-specific basis.

They can take that pool of, five contractors and inject more competition in the sense of saying of my five, I want to use this one on this site and this one on that site and, in effect, I want to give more work to those that are doing better.

Our initial concept going back four or five years was to have four or five national contractors who did, a very large amount of work across the country. Some of these firms are doing 80 or 100 projects in terms of studies per each.

What I decided to do was to break that down somewhat to have perhaps 30 or 40 contractors involved around the country so that the region would have a better ability to pick the right contractor for the right job as well as, to reward those that are doing good work and to give less work to those that don't.

We have those in place in a number of regions. Within the next few months, we will have them all in place.

Mr. Stangeland. I am encouraged by your attempts to decrease the amount of time for remedial investigations and feasibility studies, but what assurance do you have that those streamlined procedures won't lead to less protective or cost effective cleanups?

Mr. Porter. Well, I think my own engineering experience, has led me to believe over a number of years that a long, meandering study is not necessarily a good study. I think that a year and a half is a fair amount of time to study these problems.

I also will say that in the studies I have looked at in EPA since I have been here in the last three years I have not seen a tremendous correlation between length of study and quality of study. It is sometimes an inverse relationship where I think to hit the ground, be intense, work on it, you get a better study.

If it looks like we are sacrificing quality, we will certainly give. In fact, we have told people that the 18 months is a guideline. We know that certain very complex problems will take much longer than 18 months, but, in general, we want to plan for something like that time period and to really focus on those things that make a difference as early as possible.

I think sometimes we have entered into some long data gathering missions that weren't terribly helpful.

Mr. STANGELAND. What happens to a site that goes through the preliminary assessment and site investigation but receives a ranking of less than 28.5? Are States expected to clean up those sites? Do you continue to monitor them? And how will the new hazard ranking system change it?

Mr. PORTER. The new hazard ranking system won't change that exactly. It will change the factors that go in to how you pick the surviving sites.

Those sites that don't make it go in a variety of ways. Typically what happens is that it does become a State responsibility. Some we may need to revisit later. It is not impossible to come back to a site later and we may have reason to change our mind that it looks worse than we first thought or something, but, typically, it goes into some other mode of operation.

Mr. STANGELAND. Treatability studies provide helpful information in order to select specific technologies in the record of decision. OTA claims most treatability studies are done too late in the process, such as after the ROD and during the design phase.

Is this true and, if so, why? Shouldn't they be done before the ROD and during the remedial investigation and feasibility study?

Mr. PORTER. That was, I think, a reasonable criticism in the report. On the other hand, though, I would say we are beginning to do them and had already begun to do them sooner in the process before the release of the report. Again, it is something that is hard to generalize on.

If we are pretty confident of our remedy, we have gone through all the selection criteria, and we are quite sure we have the right remedy, it sometimes is more effective to do the final design parameters in a treatability study as you are designing that in the design and engineering phase. It is not a black and white issue.

However, we certainly are trying to do treatability studies earlier in the game as they requested, but, again, I don't think it is black and white. You can't just say it always should be done early, because sometimes you have good confidence in what you are doing and you are just developing the final design parameters.

Mr. STANGELAND. On the average, how much time does a State or community have to comment on the RI/FS and the ROD's? OTA is concerned about the lack of time to comment on these extensive documents. Do you think this is a problem?

Mr. PORTER. Mr. Stangeland, typically, there is an official period of about 30 days at the end of the process. State review of the RI/FS/ROD/ARAR determination or remedia design is generally 10–15 days in the absence of a memorandum of agreement (MOA). "Public", in general has 30 days to review the proposed plan. We have community relations programs on these sites where we try to meet with the community off and on or on an ongoing basis throughout the life of the process. We also frequently extend our comment period if in fact people think they need more time.

Mr. STANGELAND. I have one more in this area. Do you place a higher priority on sites with higher hazardous rankings, and does a high score speed cleanup?

Mr. PORTER. Not in general, Mr. Stangeland. The ranking system is not that fine in the sense of saying a site that scores 39 is a much worse site than one that scores 33. What we are really doing is determining whether it should be a Superfund site or not, and we don't put a whole lot of emphasis on order after that. We certainly consider it to some extent, but if one site were 60 and one were 30, we would tend to think that must be a much worse site than a 30, but it has to be that kind of difference, not 35 versus 32.

Mr. STANGELAND. Do the large number of sites within the surplus inventory as well as the large number of sites in the NPL present any special management problems in the administration of the program? Perhaps another way to present the question is whether the number of sites and their complexity and uniqueness make it difficult to maintain consistency in the remedy selection process.

Mr. PORTER. I think they do. I think the criticism we have been getting on consistency and other things is not totally invalid in the sense that if you are looking for a real simplistic way through it to say a site in Alabama and a site in California weren't perfectly consistent, you may find that. However, as I said earlier, there are a lot of factors that go into these selections.

It is hard. It is not just a cookbook approach, because some of these factors are qualitative and some are quantitative. We are trying to monitor them all at the national level, but certainly that is a real challenge. I have not been able to find a way to just make this kind of a turn the crank approach.

What I have found we need is very skilled professional people, people willing to make tough decisions in the program. It is not an easy job to be consistent.

Mr. STANGELAND. Did OTA—and I think I know the answer; I think you have already answered this part of the question—coordinate their report with EPA before publication? To your knowledge, was the report subject to routine internal coordination within OTA or subject to peer review, and how does OTA's coordination of this report compare with the coordination and opportunity for comment that GAO allows for their studies?

Mr. PORTER. I think, in general, we have had much better luck with GAO, a much more professional sort of interaction on their reports where they give us a chance to review the drafts and things of that nature.

On the second part of your question, there is an advisory group on the OTA report, and advisory review board. I actually took the opportunity myself to talk to several members of that, at least three, all of whom said they really had not seen the report.

They are listed as an advisory board, and there is a bit of a disclaimer saying they don't necessarily agree with the report, but they basically said that we were not given any real chance to review it. I would say, furthermore, there was certainly not anything approaching a peer review.

I would think if they continue that work, they should work much more closely with us. In addition, they should have some kind of a peer review which means something, because I think this was an effort of very few people.

Mr. STANGELAND. Would they charge that if they worked more closely with you that their report would not be an objective outside analysis but, rather, possibly a whitewash?

Mr. PORTER. I think, Mr. Stangeland, they certainly have the right in the final analysis to write what they want, so we can't dictate what they write, but I think it would have been very helpful to point out some of the technical inaccuracies. Actually, just one simple thing I would have pointed out to them is how can you say most ROD's don't meet the intent of SARA, which is their blanket statement, and then two pages earlier say we only looked at two aspects of SARA.

There are eight or ten aspects of SARA to look at in a remedy. They made the kind of legalistic comment that these don't meet the legal requirements of SARA. Well, that statement in itself is just absolutely a non-starter. If they want to make that kind of statement, they need to get into did they evaluate the community reaction, did they evaluate the State reaction, did they evaluate cost effectiveness, did they evaluate legally applicable and relevant and appropriate standards.

So, I just think what they did is they got a little carried away with the sweeping nature of their conclusions.

Mr. STANGELAND. Could you describe the results of your Superfund innovative technology evaluation of the site program, and are promising new technologies being discovered and their use encouraged?

Mr. PORTER. I am very encouraged. I had a briefing, as a matter of fact, just a few days ago on that. We have some 21 technologies that are out there now.

Most of the initial ones tended to be the thermal destruction technologies, admittedly, in new applications. We are now getting quite a few biological treatment process, various kinds of stabilization and vitrification and other such processes.

We have complete site work at six of them, and I think we are trying to work hard now to be sure the information we gain at those 21 demonstrations and the additional ones we are doing gets out to the regions so they can use it. This is meant to be a very applied sort of program. It is very applied research where if we find that a particular technology works at a site, we want to be sure the rest of EPA and the States know about that.

We are trying to do about 10 demonstrations a year, and I think it is a good program.

Mr. STANGELAND. What has been the overall level of public participation, reaction, and acceptance to the remedial design and remedial action phases of the program?

Mr. PORTER. I think okay. I think the criticism I have heard from the public along with the rest of the program is just things taking too long. I think people feel like look, you have made your decision on what to do. You are now starting your design engineering and your construction. We would like to see that move expeditiously.

That is the reason I think I mentioned that we are having this monthly review with the Corps of Engineers, for example, to be sure there is no real down time from the time we make the decision to when they start with their contractors to do design engineering or not much down time between the design engineering and construction.

What we have found is some spaces in the process where not much was happening except paperwork. We are trying to operate more on a critical path schedule.

However, I think that has been the general criticism. I think that the work is of good quality once we get on with it, but we need to keep working at how to speed up that process.

Mr. STANGELAND. Thank you.

Mr. Chairman, I will just compliment Dr. Porter and you and your staff for being very responsive and say that I think we understand the task that you have been assigned is humongous, at least. We understand that, and we just hope that you do continue to try to find new technologies. It is very important, I think, to the American public that EPA be very responsive and do their best.

We are right now in the throes of a horrendous drought, and we are finding that with that drought, as aquifers drop, the percent of contamination intensifies for the drinking water. As I said earlier, Superfund certain has a great impact on groundwater, and we are going to be concerned in the future about groundwater.

I would just say keep at it and do your best.

Mr. PORTER. Thank you.

Mr. NOWAK. Thank you.

Let us now turn to Mr. Oberstar from Minnesota who is Chairman of the Investigations and Oversight Subcommittee and had other aspects of hearing on Superfund and has certainly been one of the great followers of the law as implemented and one who participated both in 1980 and 1986 in seeing that Superfund was enacted.

Mr. Oberstar?

Mr. OBERSTAR. Thank you, Mr. Chairman. I congratulate you on holding this hearing for a further in-depth look at the issues involved in EPA's administration of the act.

It is good to see you again, Mr. Porter. We had a review of some of these issues weeks back in April at which time EPA said in testimony that it had not had time to review sufficiently the OTA report and was not willing to comment in depth until it had an opportunity to look that report over.

Since then, you have written a letter to the Washington Post just this week saying that—in fact, combining reference to two reports and not distinguishing between OTA and one produced by an environmental group—saying the two reports take an "incomplete, superficial view" of the Superfund law's requirements. The reports are "overly preoccupied with the issues of permanence and treatment," and then you make a reference to one of the authors without, again, distingishing between the two reports as to which author was associated with which report and which activity that author was engaged in.

I think you ought to, when engaging in a letter of this kind, a statement on the editorial page of the Post, be more precise. I think you owe a better debt to truth and accuracy than is referenced in this presentation here.

Only perhaps those who are afficionados of the issue itself were able to distinguish between the two reports and among the authors and read between the lines of your statement. The general public will have been misled, if, indeed, they were informed by this letter.

Mr. PORTER. Can I comment, Mr. Oberstar?

Mr. OBERSTAR. Yes.

Mr. PORTER. I think I would make a couple of comments. One is that the two reports did overlap a great deal. They looked at virtually——

Mr. OBERSTAR. But they are two separate and distinct reports, and you should have had a separate and distinct reference to each one.

Mr. PORTER. Well, I am going to come to that in just a second, but the two reports did overlap. They talked about virtually the same sites. They were released on the same day to the media. So, I felt not totally unconstrained in referring to them as kind of a group effort, and I think that is, to some extent, what they were.

With respect to that particular reference to that individual, in the first paragraph of that letter, I said that one of the reports was funded by a waste treatment supply organization. Later on when I said that person was perhaps not totally objective, I thought that would refer back to the first paragraph where I said one report is by the OTA and one by a group including a representative of a waste treatments supply organization.

Then, a few paragraphs later, I said that individual was perhaps leaning toward treatment since he sells treatment plants. I honestly believe that.

Mr. OBERSTAR. I make no case for that. I have no information about it. I do think though that your statement about overly preoccupied with issues and making a reference to one of the authors being a lobbyist for treatment system suppliers should have been precise as to which author and which report in order not to taint, as your letter attempts to do or has the effect of doing, both reports.

Secondly, the matter of being overly preoccupied with the issue of permanence—we discussed that at some length in the course of our hearing. Let me come back to that issue.

The matter of permanence is not a footnote in the law. It does say, "remedial actions in which treatment which permanently and significantly reduces the volume, toxicity, or mobility" are to be preferred.

Permanence is not the last word; it is the first word. The concern of the Congress was that toxic substances be permanently removed as the preferential—as the first—item of business.

I can understand your sensitivity to being criticized by the OTA report for not focusing sufficiently or intensively on permanence.

Now, if you are going to criticize them for being overly preoccupied, being superficial, and of poor quality, then I think it is up to you to show in what respects that OTA report is of poor quality and how it is superficial, and I want to give you that opportunity right now.

Mr. PORTER. Okay. First, Mr. Nowak has asked us to reply in this hearing with an analysis of the OTA report which we will certainly do, but let me give you a couple of examples.

First, the point I made earlier is that when they make sweeping conclusions like the RODs, that is, the selection of remedies, did not meet the intent of SARA and then by their own admission only consider two aspects of the eight or ten aspects that I have to consider in SARA, I consider that to be superficial and misleading and a few other things.

From the technical standpoint as I did in that Post article—it wasn't meant to be a highly technical statement, obviously—but the remedies that— they went one step too far, frankly, Mr. Oberstar. If they had just stopped at criticizing the program, I guess that is fine, but based on a few week analysis, they then purported to select their own remedy.

What I was trying to do in there is to show how one can fairly easily say why would you pick an incinerator, for example, when metals are the problem and metals will come out in the ash and have not been destroyed other than just you want to spend $15 million?

The other thing that I want to point out is you are right about that sentence, but there is another sentence about half a page further in the law which says the President shall select cost effective remedies which are permanent, et cetera. So, right in that same sentence, the words cost effective appear.

So, all I am saying is that it is a tough call, and what I meant with preoccupied with permanence and treatment is I have to give, as I read the law, a lot of deference to words like cost effective and the other factors in the law. They didn't give any real emphasis to those factors. They just jumped on permanence and treatment.

That is a very important part. We are trying to be permanent, but even permanent doesn't necessarily mean, at least in my mind, that you always dig something up and burn it. There may be other ways to permanently be effective on a permanent basis.

So, I think we just had a lot of problems with the way they approached the problem and the sweeping conclusions they drew, not to mention the fact that they only looked at 15 sites out of the 850 we are working on. To say that we looked at 15 or 16 sites, as OTA did, we are working at 850, and then they say most of the ROD's don't meet the intent of the law, seems sweeping to me, and I thought I should say that.

Mr. **Oberstar**. The language it refers to on page 84 of the act—and let me quote that for the record so we have this accurate—"The President shall select a remedial action that is protective of human health and the environment, that is cost effective, and that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable."

Again, cost effective is joined with the notion of permanence. This is not an afterthought by the Congress, and our hearing showed that the EPA has not been sufficiently diligent in attending to permanent disposal technology or permanent disposal of toxic substances. That came through again and again in the course of our hearing.

What you would characterize as permanent, in many cases of the examples you cited in our hearing, would not appear to me to meet the test of permanence, that is, solutions that are waiting for permanent disposal technology.

I am not an apologist for the OTA report. Nor did that report, nor do I, in any way want to appear to minimize the task and magnitude of the responsibility that EPA has. I think we all acknowledge that. That was the purpose of the hearing. It is confronted by this enormous challenge awaiting society.

Your 3,000 Superfund employees are diligent, they are dedicated, they are hard working. Many of them are inexperienced and new. They are confronting contractors, who are wily, looking for a buck fast or otherwise. They have little preparation and not as much time as many of the contractors they are dealing with to sufficiently and thoroughly analyze all of the tasks ahead of them.

I think those are factors that you acknowledge that we have to deal with, and you said in the course of your testimony that you feel that your staff is coming along, gaining experience, and learning as time goes on.

I want to clarify those points that I raised earlier about permanence and your critique of the OTA report—but what I want to see is real movement on the point that stimulated the SARA amendments themselves and that is toward permanence. We don't want simply relocated toxicity from one back yard to another.

I don't think that it is beneficial to have your office spending time defending itself against criticisms. Action, decisive action in the spirit and the letter of that law, is going to do more for cleanup than letters to the editor or notices to buck up the morale of the staff. Give them direction. Get them moving on these issues that are clearly outlined in that law.

Mr. PORTER. Mr. Oberstar, can I comment?

Mr. OBERSTAR. I want you to.

Mr. PORTER. Thank you.

I think it is important to back up the staff. I have 3,000 career employees out there that are looking to me for leadership. They are making very tough decisions. They made 112 tough decisions, and they are usually fairly thankless decisions.

They often get hit from both sides. You are spending too much money or not enough or this, that, and the other. I think it is important for me to defend them.

Mr. Hirschhorn was quoted in the New York Times as saying—he may have been misquoted, but he was quoted in the New York Times as saying the basic problem is EPA has an incompetent work staff.

That is a bit much, and you will excuse me for getting a little excited. Even though I am a political appointee, I have grown to have a lot of affection for these career people who are slugging it out, and I feel like I have to come to their defense, because the reason we only cleaned up six sites in the first 5 years, among others, in my judgment, is that people get very nervous about making these decisions.

They are tough decisions. There is a lot of criticism when they make a decision. The net result of that OTA report, if we are not careful, is two things. One, my staff out there in the regions and in the States gets very gunshy about making any kind of decision that won't pass muster with a few people at OTA and elsewhere. Second, it does a lot of damage in the communities.

The thing that troubled me most about those reports—and, remember, maybe they are right and maybe they are wrong, but one thing that is indisputable, I think, is that those studies were done in a matter of weeks at sites. We have been at those sites a matter of years with professional engineers and others.

They could still be right and we could still be wrong, but what really was devastating was the communities next to those sites read in the New York Times or the Washington Post that EPA did a lousy job at this site next to my community, based on a several week study. I just think that this gets back to this point we talked about earlier.

I am all for constructive criticism. I would like to sit down with people and talk these things through. I think it is incredibly valuable that we have this kind of dialogue, because these are not easy issues. What I would like to do increasingly with all the committees as necessary is to really talk about real decisions, a few of them.

You don't really get the flavor of this until you say let's talk about the Crystal City airport site, let's talk about the Chemical Control site. We may be wrong and Mr. Hirschhorn may be right, but you almost have to get into the—read it from the eyes of that Regional Administrator or that State official who approved it on the ground, to say why in the world did you pick this remedy. I think we need to do more of that.

Mr. Oberstar. Well, that is what we attempted to do to the limited extent of the time available at the time of our April hearing and which we will do in greater detail in subsequent hearings.

I have one final question, if I may, Mr. Chairman. The nine criteria that you cited in your May 16 response to questions asked in the course of our hearing set forth nine selection criteria. In looking that over, the law says in section 121(b)(1)(f), "The potential for future remedial action costs if the alternative remedial action in question were to fail."

In other words, the legislation asks EPA or directs EPA to factor into its cost estimates the possibility of failure of the remedy selected. You don't make reference to that except for listing cost.

To what extent has EPA factored in the possibility of failure of a selected remedy in its overall criteria with reference to cost?

Mr. Porter. Mr. Oberstar, it is really in a couple of those nine points. It is in the cost effectiveness one, because you have to look at what would be the ramifications if the remedy failed. It is also in the other one of the nine called permanence or permanence and long-term effectiveness, because you have to say, if you think about long-term effectiveness, that this remedy A is not as likely as remedy B to be effective over the long term, you would have to point that out.

I will say this, however, that I think you have a good point, and we have been talking about that recently, to say are we in fact giving enough emphasis to that. It is kind of buried in two or three of the nine. Perhaps it should be more visible.

Mr. Oberstar. There are some case histories already of remedies that were undertaken which were incomplete or which were failures and then something else had to be done which added another layer of cost. Those are matters that really have to be very carefully considered.

Now, by the same token, I know that your staff are saying if we do all this, it is going to delay clean-up and Congress is going to criticize us because we only did X number of sites. We don't want to do cleanup by the numbers, but we do want to do cleanup by the effectiveness.

If you are making a showing for the Congress that you are being diligent in pursuing all these factors that go into the cleanup to make sure that it is permanent and that it is, at the same time, cost effective as compared to all the alternatives, including the possibility of failure of a chosen remedy, then we are going to be very understanding.

Mr. PORTER. Thank you.

Mr. OBERSTAR. Thank you, Mr. Chairman.

Mr. NOWAK. Thank you very much.

We will turn quickly to Nancy Johnson from Connecticut who has been patiently waiting.

Mrs. JOHNSON. Thank you very much, Mr. Chairman.

Thank you, Dr. Porter, for your testimony. I regret that I was tied up with an amendment on the floor for much of your testimony, but as a member both of this committee and the Oversight Subcommittee, I am particularly interested in what you have to say and will review it in detail in the days ahead.

I do want to say that I think your response to the specific cases that you give are very interesting and worth our study, and it may be useful for us either in this committee on in another committee in perhaps a less formal situation to go over some of these in detail. I think you do need to and we do need to understand the complexity of the circumstances that your staff is faced with and the intense and competing pressures.

As I read the examples that you give, frankly, if I lived in that very small town that would have been required to shoulder the $20 million in cleanup costs, there wouldn't have been a local politician or a local anybody else who wouldn't have been up in arms about building an incinerator to do this when the incinerator ash would still contain the majority of the problem and you would still have the disposal issue to confront.

So, I think we do have to be very sensitive to all of the other interests and look at permanence and our legitimate goals in a realistic fashion. So, I think you did give us some insight here, but I would urge our chairman of this committee and also the Oversight Committee to perhaps provide an opportunity for members of both committees to sit down for kind of informal presentation that goes into more detail about some of the decisions that were seen differently by these two reports and by EPA.

I personally want to thank you for standing up for your staff. It is, in my estimation, a disservice to democracy the way we treat the people who are out there on the front lines having to take the really tough abuse, often, and sometimes legitimate criticism, but sometimes also unfounded abuse by those who are angered or going to have to take the burden of public policy decisions.

So, I appreciate the hard work that EPA and particularly the Superfund section has put in to comply with the first law and then to absorb the second law and now make progress.

I appreciate your testimony. I will follow up with written questions, and I thank the chairman.

Mr. **Nowak**. I thank you, Mrs. Johnson.

We had earlier requested the department to send a line by line explanation of some of the quotes in the paper. I am looking at one, "the hazardous waste site and one-time landfill in Saratoga County in New York that threatens sources of residential drinking water will be buried under pits, the report said. The waste includes PCB 60 times higher than the EPA deems safe."

You can read that, but there was, I am sure, a whole process that went into making that decision. We would like, before we have any general meetings, to have EPA respond line by line to that report and then perhaps we will have the opportunity to go to the managers of the report out of OTA and try to get a semblance of where the program is going and whether permanency is being shuffled aside to accomplish more "cost effectiveness" than perhaps on balance is necessary.

I think that is the same point that Mr. Oberstar made, that we have to look at the detail. It is really, in part, a very technical engineering decision. I would assume when it comes down, the choices are not black and white. They become very grey.

You and your staff are asked to make those choices when really the state of the art in this whole field is somewhat vague and new and the technologies, whether you incincerate or whether you use biological methods, are being tested almost on a case by case basis out in the field, although I am sure you do as much as you can in research. It still takes probably a field test before you actually come up with a conclusion that can be transferred to another site or to another set of problems at another site.

So, we are aware of that. Yet, we are very anxious to move this program forward, and we know the complexities that are out there.

Two points I might just make. One was made earlier by Mr. Molinari who had a chance to talk to me about the National Enforcement Investigation Center which, I think, to some degree, if those numbers are right and that there are 487, I think he mentioned, investigation opportunities that aren't being accomplished, again, in the total cost effectiveness of Superfund, I am wondering if perhaps administratively we shouldn't be looking at that area a little closer.

We are spending these huge amounts to try to clean up the sites. You know, we can talk about an ounce of prevention being worth a pound of cure and so forth. I think maybe we should jointly have a discussion about that and try to see where we are because of the involvement of this vast area and as it becomes more expensive, I would think, to landfill or any of the other technologies to destroy the waste.

It is going to become more expensive for the suppliers out there and the users of chemicals and the users of all kinds of toxics to perhaps, more and more as the cost goes up, there will be economic reason to look for "alternate disposal areas," and we want to make sure that we have that gap closed before the higher cost as the economy has shown to in the past to push those kinds of things out if the economics of it demand it.

So, I think maybe we should revisit that as this program goes forward, because I think there will be more and more of an economic reason to look for that "alternative bad site" which will cause us larger problems in the future.

I just would like to close with this. You know, in 1986, we talked about this, too. We had estimates, and EPA ranged the estimate cost of cleanup to be $22 billion. Now, just a couple of years later, we find OTA looking at $100 billion in Federal costs and perhaps as high as $300 billion in total costs from the States, municipalities, and the private sources. Just recently, they have issued a statement that that may even be a little low.

So, it looks like we have a long way to go in this program, and the more cost effective we can make it, and I think perhaps even your own associations with the groups that are out there could be bridged to some degree by providing the managers in your own departments to have a better and more thorough kind of informational process to them so that these reports aren't written in a manner that you totally disagree with but that you could come to some areas of agreement with that dissemination of information beforehand to give some confidence to not only the Congress but to the people you are serving in the United States.

I think you rightly said that if they read a report that is critical, it is going to broad-brush the whole program, and I am sure that the 10 or 12 instances that are spoken about here are in that grey area we talked about. If we can get that described out, maybe the balance can be better met.

Let's look forward to working together on this program. I have a series of other questions that we have, but I promised to get you out by noon, and we are a couple minutes over and the bells are ringing.

So, we will submit some questions on these reports and also on other general matters and look forward to working with you and your organization at EPA in the future.

Thank you very much, Mr. Porter.

Mr. PORTER. Thank you, Mr. Chairman.

[Mr. Porter's prepared statement follows:]

STATEMENT OF
J. WINSTON PORTER
ASSISTANT ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES

July 7, 1988

Good morning, Mr. Chairman and members of the Subcommittee. It is a pleasure to be here today to discuss the Environmental Protection Agency's (EPA's) implementation of the Superfund Program. With me today are Henry Longest, Director of the Office of Emergency and Remedial Response; and Jonathan Cannon, Acting Director of the Office of Waste Programs Enforcement.

I will begin with an overview of the Superfund Program, stressing our efforts to improve the implementation process and enforcement activities. I will note the accomplishments since passage of the Superfund Amendments and Reauthorization Act of 1986, (SARA) and mention some of the activities in Title III of SARA, the Leaking Underground Storage Tank Trust Fund (LUST), and research and development. Finally, I will address some of the concerns raised in recent reports that have criticized our implementation of the Superfund Program.

## I. OVERVIEW

The first and most important point to stress in connection with the Superfund Program is that its sheer magnitude and complexity make it not only a major environmental undertaking but a dramatic management challenge. SARA did not merely extend an already complicated program -- it also increased its size and scope, set new goals and standards for cleanup, expanded the role of States and citizens in decision making, and strengthened our existing enforcement policies. The massive scale of our program is further increased by the roles that SARA assigns to other Federal agencies, which require considerable additional efforts at cooperation and coordination on our part.

We have had two major objectives since passage of SARA -- to regain and increase the momentum of the program that was lost during the uncertainties of the reauthorization process and to implement expeditiously our new responsibilities under the Act. In both areas, we have tried to navigate a careful course between the need for rapid cleanup and the need to spend our funds wisely and effectively. We are trying to move quickly, while establishing procedures that will ensure high quality results. We are generally pleased with our efforts to date and we continue to seek to improve our performance. However, despite our efforts we were recently criticized in two reports, both released on June 28. Let me now turn to specific progress in the various key aspects of the Superfund program.

## II. THE RESPONSE PROGRAM

SARA provides several major tools to deal with the complex problems at contaminated waste sites. When the sites pose significant short-term hazards to public health and the environment, we may use removal authority to take short-term actions to stabilize and control sites. We use the remedial program to focus our priorities, deal with these sites on an orderly basis and arrive at effective solutions which may cost millions of dollars to implement. Let me now turn to specific progress in the various key aspects of our program.

A. Removal Actions

One of the greater successes of Superfund implementation has been our removal program. Removal actions are generally short-term actions intended to stabilize or clean up an incident or site threatening human health and welfare or the environment. I might add that some removals are quite extensive, involving significant engineering efforts and requiring several million dollars to complete. SARA encourages the expanded use of removals by increasing our authority to take complex and costly removal actions. One of our key priorities is to use this new authority to solve a greater portion of the problem at a Superfund site through direct removal action.

This program has an excellent record of accomplishment since its inception in fiscal year 1981; in fact, we conducted more removals last year than in any previous one in the program. Since SARA, using Fund resources, removal actions were begun at 315 sites and completed at 271 sites. Responsible parties contributed an additional 101 removal action starts and 65 removal completions. A total of over 1,200 removal actions have been undertaken since the beginning of the program.

## B. Pre-Remedial Program Activities

Pre-remedial activities are investigative and analytical activities undertaken to evaluate the threat, or potential threat, posed by a site to human health or the environment and to determine the need for and set priorities for further action. The pre-remedial program which manages our comprehensive site inventory, the CERCLA Information System (CERCLIS), met the statutory goal of completing Preliminary Assessments (PAs) by January 1988 on all sites in CERCLIS at the time SARA was enacted. Since SARA (as of May 1988) more than 6000 PAs and 1800 Site Inspections (SIs) have been completed. There are now over 29,000 sites in the CERCLIS inventory. Since the inception of Superfund, PAs have been completed at more than 26,000 sites; and SIs at more than 8,500 sites.

There are 1,177 sites either proposed or listed on the National Priorities List (NPL). On June 21, we issued Update 7 to the NPL in which we added approximately 200 new sites. Last year, 99 sites (including 32 Federal facilities) were listed as final NPL sites, and 64 sites (including one Federal facility) were proposed for listing.

You specifically asked about sites which score over 28.5 but which will be deferred from listing. EPA is considering proposed revisions to the National Contingency Plan (NCP) on whether the listing of sites on the NPL should be deferred in cases where a Federal authority is found to have corrective action authority. EPA is also considering whether the listing of sites on the NPL should be deferred to State authorities and under what conditions.

There are two primary reasons why EPA is considering expanding its use of NPL deferrals to appropriate Federal and State authorities. First, such an approach might assist EPA in meeting CERCLA objectives. By deferring to other authorities, a maximum number of potentially dangerous hazardous waste sites can be addressed, and EPA could direct its CERCLA efforts (and Fund monies, if necessary) to those sites where remedial action cannot be achieved by other means. Second, where other authorities are in place to achieve corrective action, it may be appropriate to defer to those authorities.

In addition, the pre-remedial program increased the level of effort for conducting a PA to allow lead agencies (e.g. states) to more effectively identify sites that require SIs. Guidance is also being developed to direct more resources to SI activity at sites most likely to be proposed for the NPL.

As required by the SARA amendments, a major effort to revise the Hazard Ranking System (HRS) was undertaken that would assure, "to the maximum extent feasible," that the HRS accurately assesses the relative degree of risk to human health and the environment posed by potential NPL sites. Accordingly, a number of new factors are being added to the HRS, including the threat posed to the human food chain, the potential for releases to ambient air, and the impact on surface water used for recreation. Although the rule will not become effective by the statutory deadline (October 1988) established by Section 105(c)(1), the revised HRS is on an accelerated schedule and the final rule is expected to become effective in the second half of fiscal 1989.

C. Remedial Investigation and Feasibility Study (RI/FS)

The Remedial Investigation (RI) is designed to collect and analyze the data necessary to justify remedial action and to support the development of alternatives in the Feasibility Study (FS). Based on a thorough understanding of the site and the findings of the RI, the FS (often conducted concurrently with the Remedial Investigation) performs an analysis of alternative approaches that can be used to clean up a site.

Section 116 of SARA specifies that 275 RI/FSs are to begin by October 1989. We have made significant progress toward meeting that goal. Since SARA, as of the second quarter of FY88 we have begun a total 157 first start RI/FSs; 71 are being conducted by potentially responsible parties (PRPs).

Recognizing the importance of this RI/FS goal, the Agency has taken a number of actions to improve RI/FS efficiency and to incorporate changes in the RI/FS process in compliance with SARA requirements. Three major project management support activities were initiated since SARA passed:

- the Alternative Remedial Contracts Strategy (ARCS);
- the RI/FS improvements initiative; and
- RI/FS guidance and training.

Key components of ARCS include promoting continuity of contractor performance from RI/FS to construction management, increasing the level of competition for contract awards, developing incentives to promote superior performance, and facilitating contract management delegations to the Regions. The ARCS concept has been fully developed, and 12 contracts have been awarded to support Regions 3 and 5. In addition, we have completed the selection of firms to service an additional seven Regions and have preparations underway for cost negotiations with those firms. Finally, we are in the technical evaluation process to select firms to support the one remaining Region. When completed during FY89, we will have over 43 new contracts to support the remedial program.

An RI/FS improvements initiative was begun with our Regional staffs in July 1987 and updated during April 1988. The initiative includes several implementation strategies aimed at improving RI/FS projects, while concurrently streamlining the RI/FS schedule. This RI/FS improvements effort has several main objectives: (1) to constrain project planning activities to a three-month period after project initiation, (2) ultimately, to shorten the overall RI/FS process to an 18-month schedule, while reducing overall costs; and (3) to improve the technical quality of RI/FSs.

In addition to this initiative, EPA issued interim guidance setting forth its policy and procedures for PRP participation in RI/FS preparation. Within a year, EPA plans to issue guidance that will identify the procedures to be followed by Regional project managers and PRPs to properly initiate, control, and monitor PRP conducted RI/FSs.

### D. Selection of Remedy/Records of Decision

The SARA amendments to CERCLA included a number of provisions affecting the selection of remedies at Superfund sites, especially regarding the use of permanent remedies and alternative technologies to the maximum extent practicable. While we recognize that many of these new directions will need to be fully debated in rulemaking under the National Contingency Plan, we also feel an obligation to make decisions and proceed with remedial actions in response to the SARA goals.

Therefore, EPA has issued three interim guidance documents on the selection of remedies at Superfund sites: Interim Guidance on Superfund Selection of Remedy (December 24, 1986); Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements (ARARs) (July 9, 1987); and Additional Interim Guidance for FY 87 Records of Decision (RODs) July 24, 1987). These interim guidances have been incorporated into a more detailed draft Record of Decision Guidance and CERCLA Compliance with Other Laws (ARARs) Guidance which were distributed for regional review earlier this year. Supplementing these printed guidances, EPA sponsored three workshops across the country to advise our regional staffs on how to prepare RODs under SARA and to help ensure consistency of implementation.

Of special note in the interim guidance on remedy selection issued in July 1987, is its discussion of the several SARA requirements that need to be incorporated in the ROD. This guidance outlines the nine key criteria to be considered in evaluating and comparing remedial alternatives and the statutory findings about the selected remedy that must be made. These criteria are:

- Overall protection of human health and the environment;

- Compliance with applicable or relevant and appropriate requirements of other Federal and State laws;
- Long-term effectiveness and permanence;
- Short-term effectiveness;
- Reduction of toxicity, mobility, or volume;
- Ease or difficulty in implementing alternatives;
- Costs;
- State concerns with/acceptance of alternatives; and
- Assessment of community attitudes and acceptance.

Even as we have been developing guidance to implement the SARA provisions, we have been moving ahead aggressively to make decisions at waste sites. Let me review our progress.

Of the 112 RODs signed since SARA through March 1988, 67 addressed final control of the source. Forty-seven of these 67 RODs (70 percent) selected remedies that will employ source treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants, and contaminants at the site. These source treatment response actions involved use of a variety of technologies including thermal destruction (21 actions), solidification (8), stabilization (7), aeration (4), soil washing and flushing (4), biodegradation (4), and other technologies (8). In addition to source control, 47 RODs selected remedies that actively pump and treat ground water to restore aquifers.

## E. Remedial Design/Remedial Action

The selected remedy for a site is refined and specified in the remedial design phase of the process. Once designed, the project is let for bids and the selected contractor implements the project. At Fund-financed sites, EPA funds 90 percent of the costs of constructing the selected remedy, including on-site or off-site treatment to restore ground water or surface water quality for up to ten years.

We are strongly committed to meeting the SARA goal of commencing remedial action at 175 sites within three years. In addition to our efforts to improve the RI/FS process, we are giving focused attention to "managing" the 175. This means identifying and closely tracking the progress of candidate sites that will help us meet this goal, especially as they move through and beyond the ROD stage.

Since SARA, as of the second quarter of FY88, 95 first and subsequent Fund-financed remedial design projects and 48 Fund-financed remedial actions had been started. An additional 35 remedial design projects and 25 remedial actions were started by RPs over the same period. Sixty-five of the Fund-financed remedial designs and 36 of the remedial actions were first starts. Twenty-six of the RP-financed remedial design projects and 21 of the RP-financed remedial actions were first starts.

Since the passage of SARA, EPA has also begun to lay the groundwork to increase the competencies and capacity of our design and construction program in three ways: (1) Revisions to contracting procedures, such as the Alternative Remedial

Contracting System (ARCS) system, were made to improve design and construction program efficiency, (2) EPA worked with the Corps of Engineers and the Bureau of Reclamation to establish programs with those agencies that will better meet the needs of expanding Superfund construction program goals, and (3) Design and Construction Management Workshops were held for Regional and State Personnel.

### F. Technical Assistance Grants

SARA provides that technical assistance grants may be made available to groups of individuals to obtain assistance in interpreting information related to Superfund remedial actions at facilities listed or proposed to be listed on the National Priorities List (NPL). Only one grant, not to exceed $50,000, may be provided to a group at a single NPL site. Our interim final rule requires each community to contribute a matching contribution of 35 percent of the total project costs; this match may be either cash or in-kind contributions and may be waived in certain circumstances.

The interim final rule, published on March 24, 1988, provides that EPA will accept comments for 90 days. The Agency plans to publish the final rule in spring 1989. Meanwhile, EPA can award such grants and is attempting to foster participation in this program through information dissemination and developing step-by-step manuals to assist citizens with the grants program.

## IV. ENFORCEMENT

SARA strengthened the enforcement program by codifying the existing CERCLA settlement policy, establishing new authorities and procedures that facilitate private party and Fund cleanups, and adding new authorities for imposing civil and criminal penalties for failure to comply with the statutory provisions of CERCLA regarding notification and reporting. A major priority of the Superfund program is to obtain good settlements from PRPs in order to expedite cleanup and to preserve the Fund from other sites.

A. Settlements

Since SARA, the enforcement program issued 101 administrative orders for removals, responsible parties started 101 removals, and there have been 65 removal completions. Removal action settlements have risen to 323. There were 10 sites in FY87 where independent response actions were undertaken by both the Superfund program and a responsible party.

Last year, Tom Adams, Assistant Administrator for Enforcement and Compliance Monitoring and I sent a memo to the EPA regions with suggestions for streamlining the settlement process. Since then, we have continued to urge the EPA Regions to use the various tools provided by SARA to expedite settlements. These include special notice letters, nonbinding allocations of responsibility (NBARs) mixed funding settlements, de minimis settlements, covenants not to sue, and arbitration. Each of these mechanisms is discussed in turn below.

1. Notice Procedures

CERCLA promotes negotiations between EPA and private parties through the use of notice letters. Notice letters inform PRPs of their potential liability, initiate a continuing exchange of information, and provide an opportunity for PRPs to enter into negotiations to conduct or finance response activities.

Since SARA, 86 special notice letters were issued (45 RI/FS and 41 RD/RA). On November 19, 1987, the Office of Waste Programs Enforcement issued "Interim Guidance on Notice Letters, Negotiations, and Information Exchange" (OSWER Directive Number 9834.10).

### 2. Nonbinding Allocations of Responsibility

NBARs are notices sent to PRPs informing them of the percentage of total response costs at a facility that EPA considers to be their responsibility. EPA will issue NBARs (normally during the RI/FS) at its discretion if they are likely to promote settlement. After receiving an NBAR, PRPs may offer to undertake or finance a cleanup; they are expected to determine the final allocation toward settlement among themselves. As mandated by SARA, EPA has developed NBAR guidelines. These interim guidelines were published in the Federal Register on May 28, 1987 (52 FR 19919).

### 3. Mixed Funding

CERCLA section 122(b) provides explicit authority for mixed funding -- the use of both private and Fund resources to finance response actions at a single site. The concept of mixed funding reflects the approach of allocating costs between settlers and nonsettlers. By reserving some costs to nonsettlers, responsible parties are discouraged from refusing to settle. This concept can be implemented by deferring past costs or oversight costs to nonsettlers or by conventional mixed funding.

EPA issued guidance in October 1987 that discusses the factors that are considered in determining whether mixed funding is appropriate at a given site. The guidance also addresses variations of mixed funding known as "cash outs" and "mixed work." Our goal is to secure 100 percent of the remedial costs from PRPs. However, through the mixed funding concept EPA may accept through the mixed funding concept EPA may accept PRP offers of less than 100 percent in order to settle and sue later for the remainder from non-settling PRPs.

Mixed funding can be accomplished through preauthorized claims against the fund. EPA has approved three preauthorized settlements to date; several others are under consideration. The three settlements include responsible party contributions for: 79 percent of $44.8 million ($35 million); 79 percent of $3 million ($2.25 million), and 66 percent of $10 million ($6.6 million). Two additional settlements are near conclusion.

### 4. De Minimis Settlements

Section 122(g) authorizes EPA to enter into settlements with *de minimis* parties provided that the settlement is in the public interest and involves a minor portion of the response costs at the facility. Two types of *de minimis* parties are defined by this section: *de minimis* contributors (e.g., generators and transporters) and *de minimis* landowners. Parties qualifying for a *de minimis* settlement may be provided with a covenant not to sue. Settlements may be embodied in a consent decree or administrative order. Parties who enter settlements under this provision are entitled to contribution protection.

There have been two *de minimis* settlements for a value of $11.2 million. An additional six settlements are in the concurrence process. Currently, the Agency is negotiating for *de minimis* settlements at another 14 sites. The Agency issued guidance on settlements with *de minimis* waste contributors on June 19, 1987. This guidance was published in the *Federal Register* at 52 *FR* 24333 (June 30, 1987). As discussed with the Committee staff and the GAO, the Agency is presently applying the guidance on *de minimis* contributor settlements at several sites.

### 5. Covenants Not To Sue

Section 122(f)(1) authorizes EPA to issue a covenant not to sue to responsible parties for any liability to the United States under CERCLA including future liability, resulting from a release or a threatened release addressed by a remedial action. Such covenants can be used if: the covenant is in the public interest; it would expedite the response; the settler is in full compliance with a consent decree under Section 106 addressing the release or threatened release; and, EPA has approved the response action.

To update the interim settlement policy, guidance on the use of covenants not to sue (including a model covenant) was issued on July 10, 1987. This guidance covers the implementation of the mandatory and discretionary provisions of Section 122(f) of CERCLA relating to use of covenants. When all necessary conditions are met, EPA may provide a covenant not to sue, but the covenant may not take effect with respect to future liability until EPA certifies that the remedial action has been completed.

### 6. Arbitration

Section 122(h)(2) CERCLA, as amended by SARA, authorizes the Administrator, as well as the head of any other department or agency authorized to undertake a response action under CERCLA, to use arbitration as a method of settling Section 107 cost recovery claims where the total response costs for the facility concerned do not exceed $500,000 excluding interest.

EPA has drafted a regulation that will establish and govern the procedures by which EPA may use binding arbitration as a method of settling cost recovery claims. The regulation will establish procedures for the referral of claims for arbitration, selection and jurisdiction of the arbitrator, conduct of the pre-hearing conference and arbitral hearing, rendering of the arbitral decision, appeals from and enforcement of the arbitral decision, and fees.

## B. Pursuit of Nonsettlers and CERCLA 106 Actions

The Agency recognizes the importance of aggressively pursuing nonsettling parties in order to encourage settlement and deter future recalcitrance. For example, since the passage of SARA, EPA has entered into 56 judicial settlements providing for responsible parties to perform removal or remedial action or reimburse the government for Superfund expenditures. At those sites where the settlement left outstanding costs associated with the response action addressed by the settlement, EPA and the Department of Justice (DOJ) have moved to compel nonsettlers to cover outstanding costs in cases where such an action is feasible.

There are a total of 15 such actions underway, with six others being developed. On June 23, we filed two suits against nonsettlers at sites we had mixed-funded.

It is critical to pursue vigorous action against recalcitrant PRPs to give further encouragement to those considering settlement. We have issued 27 unilateral administrative orders for removals and 7 unilateral Administrative Orders for RD/RA since SARA.

Since the beginning of FY 1987, the Agency has referred only one case to the Department of Justice calling for an injunctive action to compel private party response measures. We would very much like to increase the number of administrative and judicial unilateral actions to provide better balance to the Superfund program. Toward that end, and at the direction of the Administrator, we have just completed a thorough review of candidate sites for unilateral enforcement action, and we expect to see a marked increase in referrals for judicial action in the future.

Although we continue our efforts to improve and refine the CERCLA enforcement program, I think we have valid reasons why there have not been more unilateral judicial action. First, where we have a good liability case against viable responsible parties, we have often been able to arrive at a satisfactory settlement agreement. Second, EPA is anxious to respond quickly to the threats to public health posed by Superfund sites, and using the Fund is often the most expeditious route to achieving that objective. Subsequently, every ROD we issue is in the process of being implemented through Fund or privately financed response, or through a CERCLA 106 case. We intend to ensure that such is the case throughout the life of the Superfund program.

## C. Cost Recovery

The cost recovery program has focused on prioritizing sites for cost recovery based on potential revenues, statutes of limitations and availability of PRPs. Section 107 of CERCLA authorizes recovery from responsible parties of response costs incurred by the government.

As of June 1988, EPA has reached settlements worth over $78 million in past costs with responsible parties. Since SARA, seventy-seven active cost recovery cases seeking more than $60 million have been referred. Since the inception of the program, EPA has initiated judicial cost recovery actions at 193 sites for $258 million.

The Agency has in place management systems for the review of sites for cost recovery action and case development. Procedures for administratively settling cases as authorized under SARA are nearing completion. We are continuing efforts to streamline the civil referral process and a senior management committee is in place to review and decide settlement issues to more quickly bring cases to resolution.

Our cost recovery program has continued to improve in efficiency and in the amounts recovered. We have every expectation that this progress will continue.

## D. Federal Facilities

CERCLA Section 120, added in its entirety by SARA, states that, with few exceptions, CERCLA provisions, guidelines, rules, regulations, and criteria apply to facilities owned and/or operated by the Federal government, just as they do to other facilities. To focus attention on these Federal facilities, and to implement the CERCLA requirements concerning them, EPA established the Federal Facilities Compliance Task Force. The goal of the Task Force is to establish a nationally consistent enforcement program that recognizes and encourages the full use of EPA and state enforcement tools to ensure that Federal facilities comply with CERCLA and RCRA requirements.

The Task Force recently became a permanent organization within the Office of Waste Programs Enforcement to monitor compliance with environmental laws at Federal facilities. The Federal Facilities Hazardous Waste Compliance Office will focus on management of the Federal facilities docket, policy and guidance development, and compliance monitoring.

CERCLA Section 120(c) requires EPA to establish a Federal Agency Hazardous Waste Compliance Docket. The initial docket was published in the Federal Register on February 12, 1988 and lists 1,095 Federal facilities. This docket, available for public inspection, will also contain notice of all actions taken under CERCLA regarding Federal hazardous waste facilities and all hazardous substance release notification information concerning Federal facilities submitted to EPA under CERCLA Section 103 and under the permitting and activity notification provisions of RCRA Sections 3005, 3010, and 3016.

EPA furnishes information to the public regarding facilities on the docket through Regional information repositories. A milestone tracking system is being developed to indicate each facility's progress in complying with Superfund and RCRA requirements.

On July 22, 1987, EPA added 32 Federal facility sites to the NPL (52 FR 27620), the first Federal facilities to be included on the list. Sixteen Federal facility sites continue to be proposed for the NPL, pending a complete review of comments and the resolution of technical and policy issues. On June 24, 1988, EPA proposed to add 14 Federal facility sites to the NPL (53 FR 23988), for a total of 30 proposed Federal facility sites. Additionally, we will propose an update to the NPL later this year which will focus specifically on Federal facility sites.

EPA, the Department of the Army, and the State of Minnesota signed the first Interagency Agreement (IAG) at Twin Cities Army Ammunition Plant on August 12, 1987. EPA makes the final decision on the remedy to be undertaken at a Federal facility, and the selected remedy is set forth in an IAG between EPA and the responsible Federal agency. EPA views an IAG as a comprehensive document addressing hazardous waste activities at a Federal facility from the RI/FS through the implementation of the remedial action. IAGs formalize the procedure and timing for submittal and review of documents and establish a mechanism to resolve disputes. IAGs must comply with the public participation requirements of CERCLA Section 117 and they are enforceable by citizens and states through citizens' suits. Additionally, CERCLA authorizes assessment of civil penalties against Federal agencies for failure to comply with IAGs.

In separate agreements with the Department of Energy (DOE) and the Department of Defense (DOD), EPA recently reached consensus on model language for CERCLA 120 Agreements. The agreements resolve significant policy issues between EPA, DOE, and DOD: jurisdiction, enforceability, resolution of disputes, stipulated penalties, review process for RI/FS and RD/RA documents, and funding. The agreement should expedite negotiations at DOE and DOD facilities where CERCLA is selected as the lead authority. EPA is currently negotiating IAGs at a number of DOE facilities including Lawrence Livermore Lab, Monticello (Utah uranium mill tailings site), and Hanford. We are also negotiating agreements at a number of DOD sites including Sharpe Army Depot, Picatinny Arsenal, Letterkenny Army Depot, Louisiana Army Ammunition Plant, Tinker Air Force Base and Tooele Army Depot.

## V. TITLE III

One of the major new responsibilities placed upon EPA by SARA is Title III, which has two main purposes: (1) encouraging and supporting emergency planning at state and local levels of government for chemical accidents; and (2) providing local governments and the public with information about potential chemical hazards in their communities. To support these goals, the Act requires development of a framework at state and local levels and requires facilities to submit certain information on potential chemical hazards and releases. By law, that information generally is to be available to interested citizens.

Although Title III is mainly a state and local program, we have taken several steps to provide leadership, guidance and assistance to those responsible for implementation, including:

- Encouraging the successful establishment of State Emergency Response Planning Commissions in all 50 states, Puerto Rico, the Virgin Islands, and the District of Columbia, and over 3,000 Local Emergency Planning Commissions, with more still being formed;
- Completing seven rulemakings, each of which reduced reporting burdens from statutory baselines while protecting public safety;
- Issuing two guidance documents to assist local communities in their planning;
- Submitting an interim report to Congress on the status of emergency systems;
- Providing technical guidance to industry on performing emissions inventory estimates;
- Working with the Federal Emergency Management Agency to award $5 million in training grants to states in each Fiscal Years 1987 and 1988; and
- Conducting an extensive public outreach program to inform industry and others responsible for implementation, as well as the public, of chemical emergency preparedness, prevention, and community right-to-know requirements.

This year, the Title III program will support the development of local emergency response plans due in 1988. The state and local level planning structure will be put in place, and mechanisms for data management will be developed. Training, technical assistance and review of local plans will continue to be provided by our EPA Regions. In addition, we are developing a national data base to make information on emissions available to the public. This information will be submitted annually to EPA and the states, beginning this month.

Working with other Federal agencies, we will also begin implementing our Title III enforcement program with the states, complete the emergency systems review, and continue developing a chemical accident prevention program.

## VI. LEAKING UNDERGROUND STORAGE TANKS TRUST FUND

We have another major new responsibility under SARA, created by Congress as a result of public concern over leaking underground storage tanks. The law complements our regulatory program established under the Hazardous and Solid Waste Amendments of 1984 and establishes a trust fund supported by environmental taxes. Using this new trust fund, EPA is empowered to provide the states with funds to seek owner or operator cleanup, or where the owner or operator is unwilling or unable, to initiate correct recovery of the costs incurred.

We have some major accomplishments to date, including the proposal of final regulations for tank technical standards, financial responsibility, and state program approval. In addition, we have developed policies and procedures to support implementation of the Leaking Underground Storage Tank Trust Fund (LUST). Our primary goal has been to build effective state and local programs through creating a program that will be adaptable and realistic in the 50 states and 3,000 communities where it will be implemented.

Under our regulations, which we expect to become effective in the Fall of 1988, states will be able to begin submitting their programs for EPA approval during Fiscal Year 1989. We have already negotiated 46 cooperative agreements with 43 states and three territories, and two site-specific agreements in the course of carrying out our duties.

## VII. RESEARCH AND DEVELOPMENT

SARA authorizes a comprehensive Federal research program. The overall objective of the program is to improve the scientific and technical basis of the Agency's risk management decisions at sites with uncontrolled hazardous substances. Since SARA, several new research programs were begun that address the need for better assessment of health risks posed by hazardous substances and the need for treatment technologies that provide permanent protection of human health and the environment. For example, we are establishing five university-based Hazardous Substance Research Centers, which will conduct research on the manufacture, use, transportation, disposal, and management of hazardous substances. I would like to briefly discuss a few of the research and development and health assessment activities underway that may be of particular interest to the Subcommittee.

### A. Superfund Innovative Technology Evaluation (SITE)

Section 311 of CERCLA directs the Agency to establish an "Alternative and Innovative Technology Research and Demonstration Program." In response to this Congressional mandate, EPA created the SITE program. The overall goal of the SITE program is to maximize the use of alternatives to land disposal in cleaning up Superfund sites and to encourage the development and demonstration of new, innovative measurement and monitoring technologies. The

SITE program provides private and public entities with an opportunity to test and evaluate new and alternative technologies for dealing with the hazardous substances found at Superfund sites. We currently have 21 demonstration projects underway, with field work completed at six of them. The results should help us fund appropriate technologies for meeting SARA cleanup standards.

### B. Treatment Technology Evaluation

For the treatment of site surface contamination, both surface equipment and in-situ treatment technologies are being evaluated. EPA has been providing technical assistance to our Regions for solving Superfund technical problems, and we have been soliciting and selecting for funding proposals for various Superfund research grants relating to monitoring at Superfund sites and in-situ treatment of hazardous waste.

Major accomplishments in treatment technologies were completion of a handbook on treatment of hazardous waste leachate; evaluation of the Mobile Soils Washing System; additional design modifications for the EPA Mobile Incineration System; preparation of the EPA Mobile Carbon Regenerator for reactivating spent carbon from physical/chemical treatment systems; detailed assessment of the past disposal practices of the gas industry; and development of data on CERCLA waste treatment for use in determining the best demonstrated available technology under RCRA.

Also, limited research is being conducted on the conventional water treatment technologies used to treat ground water that is pumped to the surface, but this research area may be reexamined as new technologies and approaches are identified. Some research also continues to examine in-situ ground water restoration techniques.

VIII. RECENT REPORTS CRITICIZING THE SUPERFUND PROGRAM

Two studies recently published were highly critical of the Superfund hazardous waste cleanup program. One of these reports was by the Office of Technology Assessment, another by several environmental groups and an organization representing waste treatment firms. Most of the criticism involved a perceived lack of "treatment" and "permanence" in the remedies chosen for Superfund site cleanups. From the handful of sites reviewed, the studies extrapolated to global indictments of the whole Superfund program.

SARA Section 121 requires that permanent solutions and alternative treatment technologies be used at Superfund sites to the maximum extent practical. In addition, SARA created a statutory preference for remedies that use treatment as a principal element to reduce the toxicity, mobility, or volume of contaminants. The use of treatment-based source control remedies has been increasing steadily over the history of the Superfund program. Eleven percent of the RODs signed from FY82 to FY84 were for remedies that used treatment to address the source of contamination at a site. In FY85, 18 percent of the RODs included treatment-based source control remedies. By FY87, 33 percent (25) of the remedies selected were treatment-based remedies. Actually, since the reauthorization of Superfund in 1986, we have used treatment technologies at almost 70 percent of our sites, since each site usually has more than one ROD.

Regarding the cleanup remedy selection issue, the two recent reports take an incomplete, superficial view of the Superfund law's requirements. It is very important to note that the Superfund law requires EPA to select cost-effective remedies with, indeed, a preference for treatment and permanence. EPA is also required to conduct a community review of EPA's proposed remedies and, in effect, obtain State concurrence on fund-financed remedies since States must pay 10 percent of the project cost. Let me turn to a brief, real-world discussion of two site decisions as examples to provide some balance to these recent reports.

EPA was berated in these studies for not selecting waste incineration at the Crystal City Airport site in South Texas. This is a Superfund site where pesticide residues from crop dusters were left on the airport grounds A few key factors were omitted by our critics: 1) the major contaminant is arsenic, which would simply pass through an incinerator and require disposal in the ash; 2) the contaminants at the site are very immobile, having moved only a few inches in 20 years; and 3) a very thick impervious clay underlies the site, with ground water below 700 feet. Thus, EPA selected a $1-2 million remedy involving consolidation of the contaminants, capping with clay and ongoing monitoring. Given these and other considerations, EPA did not choose a $15 million incineration remedy and then pursue the small town potentially liable for these damages.

At the Chemical Control site in Elizabeth, New Jersey, both reports criticize the Agency for selecting an innovative treatment technology that will bind the contaminants in the soil, approaches. We will work unremittingly to implement and improve the program you have entrusted to us, which is of critical importance to public health and the environment.

This concludes my prepared statement, Mr. Chairman. My colleagues and I will be happy to answer any questions you may have.

United States
Environmental Protection Agency

Office of Solid Waste and
Emergency Response

Washington, D.C. 20460

# Superfund Advisory

## Spring 1988

### AGENCY PROUD OF CERCLA ACCOMPLISHMENTS, THOMAS TESTIFIES

The CERCLA program, as enhanced by SARA, is immense and complex, but EPA is making steady progress in implementing it, according to EPA Administrator Lee M. Thomas, at an April 20 hearing before the Investigations and Oversight Subcommittee of the House Public Works and Transportation Committee. Administrator Thomas was joined by Dr. J. Winston Porter, Assistant Administrator for OSWER; Henry Longest, Director of the Office of Emergency and Remedial Response; and Jon Cannon, Acting Director of the Office of Waste Programs Enforcement (OWPE).

Thomas told subcommittee Chairman James L. Oberstar (D-MN) that the two major objectives of CERCLA since passage of SARA were to regain and increase the momentum of the program that was lost during the uncertainties of the reauthorization process, and to implement expeditiously the new responsibilities under the Act. Some of the highlights of Administrator Thomas' remarks about site work, enforcement, and cost recovery since passage of SARA in October 1986 are shown in the box.

**Site Work Since SARA**

| | Planned | Actual |
|---|---|---|
| • Preliminary assessments | 5,209 | 6,081 |
| • Site inspections | 1,635 | 1,814 |
| • RI/FS starts | 185 | 156 |
| • Records of decision | 167 | 111 |
| • Remedial design starts | 128 | 70 |
| • Remedial action starts | 79 | 60 |
| • NPL deletions | 17 | 12 |
| • Site completions | 6 | 8 |
| • Emergency Removals | 275 | 350 |

**Enforcement Since SARA**

| | Planned | Actual |
|---|---|---|
| • RI/FS settlements | 50 | 68 |
| - Value | | ($ 40 M) |
| • RD/RA settlements | 44 | 32 |
| - Value | | ($ 286 M) |
| • Cost recovery settlements | | 69 |
| - Value | | ($49.1 M) |
| • Cost recovery referrals | 55 | 52 |
| - Value | | ($ 200 M) |

Regarding the two new programs established under SARA, Title III and the Leaking Underground Storage Tank (LUST) Trust Fund, Administrator Thomas offered the following examples of progress:

- Under Title III, EPA has encouraged the establishment of State Emergency Response Planning Commissions in 50 States, Puerto Rico, the Virgin Islands, and the District of Columbia; and over 3,000 Local Emergency Planning Commissions.

- As part of the nation-wide planning effort, the Agency has completed seven sets of rulemaking, issued two guidance documents, provided technical assistance to industry on performing emissions inventory estimates, and is working with the Federal Emergency Management Agency to award $5 million in training grants to the States each in FY 1987 and FY 1988.

- Under the LUST Trust Fund, the Agency has proposed final regulations for tank technical standards, financial responsibility, and State program approval, and developed policies and procedures to support implementation of the Trust Fund.

"As with any program of this scope and complexity, experience and changing conditions will continue to call for new or altered approaches," Thomas told the Representatives. "We will work unremittingly to implement and improve the program you have entrusted to us, which is of critical importance to public health and the environment."

## DENVER RADIUM SITE CLEANUP ILLUSTRATES CERCLA'S GOALS

The CERCLA cleanup effort at the Denver Radium Site represents a model effort of how the program's goals can be achieved, according to Dr. Porter. Colorado Governor Roy Romer and Mayor Federico Pena also were in Denver on May 2 to witness the start of the CERCLA remedial cleanup at the former Robinson Brick Company site, which contains some 7,200 cubic yards of soil and debris contaminated by low levels of radium from turn-of-the-century radium processing.

In his remarks, Dr. Porter observed four examples of how the cleanup at the Denver site illustrates the way EPA is managing the CERCLA program:

- First, EPA's bias for action is aimed at starting cleanup steps that are consistent with a final remedy earlier in the remedial planning process. The Robinson site contamination will be stabilized and the waste ready for shipment by the time contracts for disposal are signed.
- Second, a flexible response plan can be adjusted according to changing conditions at the site. EPA Region VIII had the foresight to include permanent disposal as an option so that it could be implemented quickly once specialized radioactive waste disposal facilities become available.
- Third, the cleanup will be based on existing health-based standards to guide the Agency's efforts. In this case, EPA will base its response actions on the uranium mill tailings cleanup standards.
- Fourth, the Department of Energy will assist in the cleanup of the site, representing the innovative use of contractor resources available to the Federal Government in the CERCLA program.

The $7.5 million cleanup of the site will involve excavating 16,500 cubic yards of the contaminated soil and shipping it to an out-of-State disposal facility once one is chosen. The contaminated material will be stored temporarily on the site until October 1988, after which it will be moved to the disposal facility. An adjacent site, called the Rio Grande Railroad right-of-way, also will have radium-contaminated soils removed when the Robinson property is excavated. The two sites represent 23% of the radium contamination in the area.

## PORTER EMPHASIZES FOCUSED AND EXPEDITIOUS APPROACH TO REMEDY SELECTION

In a March 16, 1988, memorandum to Regional Administrators, Dr. Porter re-emphasized that the selection of a Superfund remedy requires a balancing process among numerous, and sometimes competing, factors. The key to successful decision-making is to recognize that each Superfund site is unique and to select a protective remedy for which there is, hopefully, support in the State and community. Additionally, all remedy decisions should follow consistent, professional considerations of relevant selection factors. The March memorandum highlights four specific tools for expediting the remedy selection process:

- Focus early in the process on key remedy options to ensure adequate data collection during the remedial investigation/feasibility study (RI/FS). Consider all nine selection criteria, not just the technical criteria.
- Involve the State and community throughout the RI/FS so that they can support the selected remedy.
- Maintain a bias for action in Superfund cleanups by undertaking operable units as early as possible at a site and striving for an 18-month RI/FS.
- Seek more effective contractor support in conducting the RI/FS in order to apply experienced engineering and management judgment and to expedite review of remedial alternatives.

Dr. Porter realizes that the remedy selection process is a difficult one and encourages Regional Administrators to become involved early in the process to help EPA staff focus attention on important issues and alternatives.

The March memorandum resulted from a recent Regional Administrators' meeting during which the remedy selection process was discussed.

## EPA PURSUES AGGRESSIVE ENFORCEMENT PROGRAM

The Superfund enforcement program has kept an aggressive pace in recent months. In addition to reaching approximately 23 RI/FS settlements, 5 removal settlements, and numerous RD/RA settlements in process for lodging with potentially responsible parties (PRPs) in the first two quarters of this fiscal year, OSWER's Office of Waste Programs Enforcement (OWPE) has developed guidance, conducted public forums, and participated in conferences on a variety of enforcement issues.

## Municipal Settlement Conference

On March 31, 1988, OWPE sponsored a Municipal Settlement Conference to provide a public forum for raising issues and gathering information about settlements with municipal PRPs. This information will ultimately be used by OWPE to support the development of a national Municipal Settlement Policy.

Gene A. Lucero, former Director of OWPE, Henry L. Longest II, Director of the Office of Emergency and Remedial Response (OERR), and Sylvia K. Lowrance, Director of the Office of Solid Waste (OSW), and approximately 100 others participated in a series of roundtable discussions on municipal settlement issues. Participants included representatives from EPA, the Department of Justice, State and local governments and organizations, as well as industry and environmental groups and Congressional committees.

Conference participants generally praised the Agency for creating a forum where outside parties could raise issues, voice concerns, and participate in the debate. OWPE currently is considering ways to continue outside group involvement in this debate, including the possible establishment of a Municipal Settlement Discussion Group.

## Mixed Funding Guidance

EPA recently published, and opened for public comment, draft guidance on the use of mixed funding. The guidance outlines the three types of mixed funding and the circumstances under which each may be used.

Mixed funding allows settling PRPs and EPA to split the costs of the response action while EPA pursues viable non-settlers to recover the Fund share. Mixed funding is a valuable tool that gives EPA increased flexibility in settling Superfund cases and expediting site cleanups. Early settlement with PRPs through mixed funding also may reduce EPA's litigation costs.

While mixed funding is important in expediting settlement with PRPs and conducting site cleanup, EPA will continue to seek 100 percent of response costs from PRPs where possible. The guidance emphasizes that mixed funding settlements do not change EPA's approach to determining liability. PRPs may be held jointly and severally liable and EPA will attempt to recover EPA's mixed funding share from non-settling PRPs whenever possible.

## Cost Recovery Conference

On March 8 through 10, 1988, EPA held a cost recovery conference in Atlanta, Georgia. Dr. Porter emphasized referrals of large cases where remedial actions have been started and substantial removals have been completed. The conference also addressed the issues of cooperating with States and other Federal agencies on records management issues, handling PRP confidential business information, determining levels of documentation required for cost recovery actions, using information management technology, and issuing demand letters to maximize recoverable interest.

Cost recovery is an essential part of the Superfund enforcement program. Under SARA, cost recovery actions are expected to generate $450 million in revenues returned to the Fund by 1991. The conference provided a valuable opportunity for cost recovery personnel to familiarize themselves with the goals and objectives of cost recovery and discuss a strategy to meet these objectives.

**REPORT FROM THE FIELD**

- OWPE has prepared an initial assessment of the universe of potential Section 106 candidate sites. Criteria for selection of 106 candidate sites were provided to the Regions.
- After lengthy negotiations at the Regional and National level, EPA and the Department of Defense (DOD) signed a Federal Facility Compliance Agreement (FFCA) on April 29 to address RCRA violations at the Iowa Army Ammunition Plant in Middletown, IA. The FFCA contains model language on enforceability, dispute resolution, and funding, which will be applied nationally by DOD and EPA to agreements at other facilities. Agreement on this language should also allow the Region to finalize negotiations on the FFCA for the Lake City Army Ammunition Plant in Independence, MO.

## SEVEN NPL SITES TO BE DELETED

On April 7 EPA began the formal process of deleting seven CERCLA sites from the National Priorities List (NPL). All of the necessary cleanup or response actions at the seven sites have been concluded, which makes them candidates for deletion. The public is given the opportunity to comment on the proposed deletions.

The seven sites are:

- A.L. Taylor ("Valley of the Drums"), Brooks KY;
- Lee's Lane, Louisville, KY;
- Galloway Pits, Galloway, TN;
- Newport Dump, Newport, KY;
- Mowbray Engineering, Greenville, AL;
- Matthews Electroplating, Roanoke City, VA; and
- Presques Isle, Erie, PA.

On March 14, two other NPL sites were proposed for deletion: Tri-City Oil, Temple City, FL, and Varsol Spill Site, Miami, FL.

To date, a total of 35 sites have been or are in the process of being deleted from the NPL.

## REGULATION UPDATE

### EPA Publishes Technical Assistance Grants Regulation

On March 24, 1988, EPA published an Interim Final Rule (IFR) for the technical assistance grant program. EPA decided to issue the rule as interim final to establish the grant program immediately. This allows us to begin accepting applications from citizen groups and issue grants while receiving comments that will be considered in developing the final rule.

Technical assistance grants are authorized under section 117(e) of CERCLA, which allows EPA to make grants available to communities affected by a release or threatened release at an NPL site. Community groups may use these grants to obtain assistance in interpreting technical information on the nature of the hazard and recommended alternatives for investigation and cleanup throughout each stage of the Superfund process. The grant is limited under CERCLA to $50,000 per NPL site. In the interim final rule, EPA has set the grant recipient's matching funds requirement at 35 percent of the total cost of the expert advice. This requirement may be waived if the grant recipient demonstrates financial need and the waiver is necessary to facilitate public participation.

The IFR outlines a three-tiered approach to reviewing technical assistance grant (TAG) applicants. As a first step, EPA will determine if the applicant is an eligible group. Only non-profit organizations that are incorporated specifically for the purpose of addressing a Superfund site are eligible for TAGs. Once EPA determines that an applicant is an eligible group, it will evaluate whether the group can meet the minimum administrative and management requirements that apply to all Agency grant and procurement activities. The final step in the application review process is to evaluate the extent to which the group is "affected" by a release or threatened release at an NPL site and who can use the grant most effectively. In addition to applicant screening and evaluation procedures, we establish in the IFR minimum credentials for a technical advisor.

EPA also published an Advance Notice of Rulemaking (ANRM) on March 24, 1988, to request comment on the Agency's proposal to provide TAG applicants and recipients with an Administrative Services Contractor (ASC). The purpose of the ASC would be to help applicants and recipients prepare grant applications, procure the technical assistance, and manage the contract. According to Daphne Gemmill, EPA Project Officer for the TAG regulation, "EPA understands that there is an administrative burden associated with the TAG program. The EPA grant and procurement regulations are complicated. The Administrative Services Contractor is one option for streamlining the process for both EPA and the public." EPA is accepting comments on both the IFR and the ASC concept.

EPA expects a high level of activity in the technical assistance grant program during the next several months. To date, EPA has received 28 letters of intent, the first step in the TAG application process.

### Agency Publishes Proposal for Transfer of Federal Real Property

As part of the CERCLA section 120 Federal facility provisions, section 120(h) requires that a notice disclosing the type and quantity of hazardous substances that have been stored for one year or more, or released or disposed of on real property sold or transferred by the United States be provided with the contract of sale for that property. EPA published a proposed rule on the transfer of Federal real property on January 13, 1988. In this regulation, the Agency proposes that the notice for the storage, release or disposal of hazardous substances at Federal real property contain the name of the hazardous substance, its Chemical Abstract Services Registry Number, the regulatory synonym (where applicable), the RCRA hazardous waste number (where applicable), the quantity stored for one year or more, or released or disposed of, and the dates of such storage, release, or disposal.

EPA determined that small (one-to-four family) residential units would be excluded from the notice requirements because it is unlikely that these properties would have significant hazardous substance activity. While Superfund specifically requires that notice be given only when hazardous substances are stored on the property for one year or more, EPA interpreted this one-year trigger to indicate that storage is not as significant an activity as the release or disposal of hazardous substances. Therefore, EPA proposes a quantitative trigger for the storage notice requirement, as well.

The Agency received 13 sets of comments on the proposed rule. EPA is expecting to promulgate a final regulation later this year.

## EMERGENCY RESPONSE DIVISION KEEPS BUSY PACE

The Superfund removal program, which is managed by the Emergency Response Division (ERD) within OERR, has been a highly successful and busy part of the Superfund program. Removal actions are relatively short-term response efforts designed to protect human health or welfare or the environment from actual or threatened releases of hazardous substances, or from pollutants or contaminants that may present an imminent and substantial danger. Superfund limits removal actions to 12 months in duration and $2 million in total project cost. EPA may grant exemptions to these limits under specific circumstances.

By far, FY 1987 was the most active year for the removal program, with 254 removals initiated and 195 removals completed across the United States. In total, EPA has initiated 1,170 removal actions since the enactment of Superfund. In addition, the Environmental Response Team (ERT) within ERD provided technical assistance at 195 sites and spills, and conducted training courses for more than 3,500 students during FY 1987.

Timothy Fields, Jr., Director of ERD, expects FY 1988 to be another busy year for the removal program, with goals of 190 removal action starts and 174 removal completions. The ERT is planning to assist EPA's Regional offices at 160 sites and spills, and to conduct at least 200 training courses. ERD also developed eight regulations during FY 1987, and expects to develop six additional regulations during FY 1988.

### Emergency Response Cleanup Services Contracts

The removal program uses contractors to perform many of the cleanup activities during a removal action. The Emergency Response Cleanup Services (ERCS) contracts have been a highly effective tool for EPA's removal efforts. Currently, EPA has four ERCS zone contracts to provide cleanup support to the Regions. EPA has initiated a program to provide additional ERCS support to individual EPA Regions. Known as "mini-ERCS," EPA has awarded contracts to three firms in Region III, one firm in Region IV, and one firm in Region V. Four dioxin-related cleanup contracts have been awarded in Region VII. We plan to award five additional mini-ERCS contracts by the end of 1988.

According to Dr. Porter, using ERCS and mini-ERCS stimulates competition, expands response capabilities, and augments options for emergency response cleanup services. With this approach, the Regions will have greater flexibility in choosing contractors that best suit their needs.

### Removal Priorities Initiative

The removal program had its biggest first two quarters ever in FY 1988, with obligations of over $40 million. Dr. Porter issued a directive in March reaffirming that individual Regions are responsible for managing their removal program within their assigned budget. The Directive urges the Regions to pursue other response mechanisms prior to a removal action, such as PRPs and State funds.

## EPA INITIATES OSC/RPM CAREER ADVANCEMENT PROGRAM

EPA, in its continuing effort to improve the efficiency and effectiveness of the Superfund workforce, is developing a new program to assist On-Scene Coordinators (OSCs) and Remedial Project Managers (RPMs) in managing cleanups at remedial and removal sites. OSCs and RPMs are posed with increasingly complex administrative, legal, and technical situations in the Superfund program. The OSC/RPM support program will be designed to address these situations, including:

- A training institute that will emphasize contracts management, legal training, site management, and technical issue resolution
- Continuing education with multi-year employment commitments
- OSC/RPM certification and registration
- Awards and recognition for outstanding performance
- Professional development for OSCs/RPMs
- Workforce planning techniques that focus specifically on OSCs/RPMs.

EPA's goals for the OSC/RPM support program are to provide site managers with an opportunity to grow professionally and to recognize the diverse roles and responsibilities that are necessary in order to clean up hazardous substance releases effectively.

Training planned for OSCs/RPMs under the new program will require four to six courses during the first year of employment, followed by a required two weeks of training in each additional year of employment. EPA also will use this new program to encourage mentoring within the Superfund program, whereby a newer OSC/RPM will be assigned to a more experienced colleague. OSCs/RPMs will be involved in rotational assignments at EPA Headquarters, laboratories, other EPA Regions, and at different locations within the same Region in order to give site managers a broad perspective of the Superfund program.

The Agency also is emphasizing continuing education. In this effort, OSCs/RPMs will have the opportunity to take sabbaticals during their fourth or fifth year of involvement in the Superfund program. A certification program will be established, providing specific performance criteria for each career track.

EPA envisions training institutes as universities or a consortium of universities that will be selected to develop and teach case studies to OSCs/RPMs, with input from site managers in the Superfund program. EPA also is considering an awards/recognition program for OSCs/RPMs to identify outstanding individual or group efforts.

The OSC/RPM support program is in the conceptual stage currently. EPA hopes to begin implementing parts of the program during the next several months.

## CORPORATIONS TEACH OUST STAFF ABOUT FRANCHISES

Staff from EPA's Office of Underground Storage Tanks (OUST) met with franchise managers from several major corporations in February 1988 to explore ways in which EPA and State UST programs can apply principles used by franchisers.

Corporate participants included franchise managers from McDonald's, the Southland Corporation, Century 21, and Service Master. The workshop included discussions on franchise philosophy, roles of Headquarters and Regional Offices, relations with franchisees, problem solving, and performance improvements, and how these methods and experience might apply to the UST program.

The size of the regulated community, variations in conditions in the field, and EPA's existing capacity to address the UST problem have led EPA to look at innovative solutions. OUST has adopted the franchiser/franchisee concept as a management tool for administering the UST programs. According to Ronald Brand, Director of the Office of Underground Storage Tanks, the EPA UST staff in the Regions will function as franchiser "service representatives" to the State "franchisee" UST program and provide technical assistance, training, and incentives to States much like corporations work with their franchise operations.

The franchise managers shared their companies' methods with OUST staff. OUST believes that implementation of these methods will improve communication efforts between the Regions and States and increase State performance as this environmental program develops.

## U.S. AND MEXICO SIGN ACCIDENTAL RELEASE CONTINGENCY PLAN

On January 29, 1988, United States (U.S.) and Mexican officials signed the "Joint Contingency Plan for Accidental Releases of Hazardous Substances Along the Border." This plan marks the beginning of intensive efforts between the two countries to ensure effective and timely bilateral emergency actions involving hazardous substance releases along the 1,200-mile inland border, which includes 28 cities and a population of approximately 15 million.

The plan was concluded during a meeting in Mexico City of the U.S. and Mexican National Coordinators, and is part of an agreement of cooperation that was begun in 1983 and signed by Presidents Reagan and de la Madrid to protect and improve the environment in the border area. Sheldon Meyers, serving as the U.S. National Coordinator, signed the plan for the U.S. The plan was developed by the Joint Response Team chaired jointly by Jim Makris and Rene Altamirano. EPA members of the working group included Charles Gazda and Minnie Rojo from Region VI, Kathleen Shimmin and Ed Snyder from Region IX, and Janice Quinn from Headquarters.

EPA has continued to meet with officials from SEDUE, Mexico's Environmental Protection Agency. These meetings have resulted in a strategy to develop 14 sister city plans between the 28 border cities to improve international response efficiency. As part of this strategy, both countries will provide training and technical assistance to Mexican and U.S. officials at the Federal, State, and local levels on contingency planning, hazardous substance response, chemical inventory development, and chemical facility identification in the border area. Bilateral activities also include exchange of information on chemicals, facilities, available training, response methods, and relevent data to ensure effective response actions. The first model sister city plan will be developed for Calexico, California and Mexicali, Mexico.

A similar agreement with Canada is under development and is expected to be completed this year.

## CONTRACT LABORATORY PROGRAM CONTINUES TO EXPAND

EPA supervised the private laboratory analysis of over 92,000 samples from Superfund sites during FY1987, according to Joan Barnes, Chief of OERR's Analytical Operations Branch, which oversees the Contract Laboratory Program (CLP). The CLP comprises over 90 private analytical laboratories in the United States that perform a variety of routine or special analytical services for the Agency, most of which is in support of the Superfund program. EPA spent over $45 million for the Superfund CLP effort in FY1987.

Superfund response actions require taking a considerable number of site samples and performing analyses of these samples to determine what hazardous substances are present, what media are contaminated, and the extent to which the contamination has spread. For example, it is not uncommon for EPA to require over 100 samples during a removal action, and over 300 samples during a remedial action. Because of the high demand for laboratory support, EPA created CLP early in the Superfund program to rely on the private sector to perform such analyses. Today, a majority of all Superfund-related samples are analyzed through the CLP.

The objective of the CLP is to provide legally defensible analytical results for use in supporting EPA enforcement and site response actions. As such, the Agency believes that a high level of quality assurance and documentation is necessary for the program to be successful. EPA has established stringent standards for CLP laboratories, including inspections of facilities to ensure that staff and equipment are adequate, correct analysis of samples, and periodic audits of analytical reports by EPA staff and contractors. Laboratories bid competitively for sample lots. CLP laboratories can perform inorganic, organic, and/or dioxin analyses.

CLP laboratories perform two types of services: routine analytical services (RAS) for organic, inorganic, dioxin, and "high hazard" samples, and special analytical services (SAS) to provide unique, non-standard efforts for organic and inorganic compounds. During FY1987, total CLP RAS activities averaged 2,100 organic/dioxin and 2,400 inorganic samples monthly, and 44,784 SAS samples were analyzed. October 1987 was the busiest month in CLP history, with some 3,600 RAS organic and 4,100 RAS inorganic samples analyzed. EPA spent $3.5 million for RAS and $2.2 million for 5,437 SAS samples in that month alone. The total CLP support is for Superfund analytical needs in each of the ten EPA Regions, States conducting site investigations and cleanups under Cooperative Agreements with EPA, and non-Superfund clients, including EPA's Office of Water, Office of Solid Waste, the Dioxin Monitoring Program, the Acid Rain Program, and the U.S. Army Corps of Engineers.

## SUPERFUND SCORECARD

| Action | Description | Number* |
|---|---|---|
| **Sites in CERCLIS** | Inventory of abandoned or uncontrolled hazardous wastes sites | 28,991 |
| **Preliminary Assessments (PA)** | Initial assessment of potential hazards | 26,390 |
| **Site Inspections (SI)** | On-site investigation of hazards | 8,315 |
| **National Priorities List (NPL)** | List of hazardous waste sites eligible for Superfund monies | 951 |
| **Removal Actions** | Short-term actions to address immediate threats | |
| • NPL | | 257 |
| • Non-NPL | | 913 |
| **Remedial Investigations/ Feasibility Studies (RI/FS)** | Engineering studies at NPL sites to examine contamination and identify possible remedies | |
| • In Progress | | 556 |
| • Cumulative Starts | | 613 |
| **Remedial Designs (RD)** | Detailed design plans and specifications for implementing chosen remedy | |
| • In Progress | | 118 |
| • Cumulative Starts | | 202 |
| **Remedial Actions (RA)** | Construction or implementation of chosen remedy | |
| • In Progress | | 81 |
| • Cumulative Starts | | 183 |
| **NPL Site Cleanups** | Site cleanup actions complete | |
| • Site Work Completed | | 24 |
| • Deleted from NPL | | 13 |
| **Settlements** | Sites where potentially responsible parties (PRPs) are conducting cleanup work | |
| • Number | | 447 |
| • Value | | $645M |

* As of 3/31/88

For more information on any item in this advisory, contact EPA's RCRA/CERCLA Hotline at 202-382-3000 or 1-800-424-9346.

United States
Environmental Protection
Agency

Office of
Public Affairs (A-107)
Washington DC 20460

EPA

# Superfund Status Report

TUESDAY, JUNE 21, 1988

Priscilla Flattery 202-382-4387

The Superfund Amendments and Reauthorization Act (SARA) was signed into law on Oct. 17, 1986. The five-year, $8.5-billion program provides federal authority and resources to address the nation's uncontrolled hazardous waste site problems. This report will be updated and issued quarterly to identify progress made in the Superfund program.

SUPERFUND INVENTORY OF POTENTIALLY HAZARDOUS SITES: 29,463 sites have now been identified as potential hazardous waste sites. Preliminary assessments have been completed at 27,082 of these sites. 8,875 site investigations have been completed. Those sites posing the greatest potential hazard and requiring significant long-term action under Superfund will be assessed for placement on the National Priorities List (NPL).

NATIONAL PRIORITIES LIST: There are presently 1,177 sites on the agency's priority list of hazardous waste sites. NPL sites are identified through a process which evaluates sites according to threats to nearby populations through actual or potential contamination of groundwater, surface water or air. There are 799 final sites and 378 proposed sites on the NPL at the present time. Sixty-two of these are federal sites. Sixteen sites have been deleted from the NPL and an additional five have been proposed for deletion.

SUPERFUND REMOVAL ACTIONS: Removal actions are undertaken to stabilize or remediate hazardous waste sites or incidents that pose a short-term threat to human health or the environment. SARA allows such removal actions to last up to 12 months and to cost up to $2 million. 1,217 removal actions have been undertaken; 376 of these were performed at NPL sites.

SUPERFUND REMEDIAL ACTIVITIES: Thirty-two NPL sites have completed remedial activities. These sites include those which have been deleted from the NPL, are propose for deletion, or soon will be proposed for deletion. An additional three sites have been completed, but operation of control systems remains underway.

(more)

- NPL REMEDIAL ACTIVITIES - There currently is work underway at 881 NPL sites. Activities at an NPL site are undertaken in several **phases**:

| currently underway | completed | |
|---|---|---|
| 641 | 327 | RI/FS - A Remedial Investigation/Feasibility Study is the initial study conducted at the site to determine the type and extent of contamination and to identify possible remedies. |
| | 327 | ROD - A Record of Decision documents the chosen remedy. A completed RI/FS results in a ROD. |
| 137 | 149 | RD - The Remedial Design details the engineering design plans and specifications for conducting the remedial action. |
| 103 | 68 | RA - The Remedial Action stage is the implementation of the chosen remedial activity. (This number refers to completed actions at portions of sites -- operable units as well as whole sites.) |

- NPL SITES IN LONG-TERM RESPONSE - Many NPL sites will require continuing actions, such as long-term pumping and treating of groundwater, long after the remedial activity and final construction are completed. These sites will not be deleted from the NPL until the long-term response efforts are completed (e.g. achieving the required cleanup level in the groundwater). At present, EPA has completed work at three sites where operation of control systems remains underway.

SUPERFUND ENFORCEMENT ACTIONS: The agency can require accountable private parties to pay for or undertake activities at Superfund sites. Through enforcement actions, EPA and the states have secured from private parties approximately $600 - $700 million through 735 actions. EPA has issued 602 administrative orders requiring responsible parties to take action at sites. EPA has referred 281 cases to the Department of Justice and 232 of these have have been filed in the courts.

SUPERFUND COST RECOVERY: The agency has initiated judicial cost-recovery actions at 191 sites for $258 million. In addition, EPA has achieved administrative settlements at 68 sites for cost recovery through fiscal year 1987. To date, $78 million has been reimbursed to the fund.

SUPERFUND BUDGET INFORMATION: Since 1981, Congress has appropriated $4.4 billion to the Superfund program. In 1988, Superfund is operating under a $1.5-billion budget for the year. EPA has requested $1.6 billion for fiscal year 1989.

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# # #

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B 376 Rayburn Building
Washington, D. C. 20515
August 31, 1988

Mr. John H. Gibbons, Director
Office of Technology Assessment
Congress of the United States
Washington, D. C. 20510

Dear Mr. Gibbons:

At the July 7, 1988, hearing by the Public Works and Transportation Subcommittee on Water Resources on Superfund implementation, Environmental Protection Agency Assistant Administrator J. Winston Porter made several statements on which I would appreciate your comment.

Mr. Porter stated, in response to a question from one of our Members, that he had personally contacted three members of OTA's Advisory Board, all of whom said they "really had not seen" the OTA report, Are We Really Cleaning Up? 10 Superfund Case Studies. What opportunities did the Advisory Board have to review the report?

He further stated that the report was given "certainly not anything approaching a peer review," and that OTA "should have some kind of a peer review which means something." To what extent was the report submitted to peer review?

As one of the Subcommittee Chairman who originally requested OTA's review of Superfund implementation, under which the report in question was prepared, I would appreciate your responses to these questions for inclusion in the record of that hearing.

With all best wishes.

Sincerely,

James L. Oberstar

James L. Oberstar, Chairman
Subcommittee on
Investigations and
Oversight

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Congress of the United States
OFFICE OF TECHNOLOGY ASSESSMENT
WASHINGTON, DC 20510-8025

JOHN H. GIBBONS
DIRECTOR

September 23, 1988

The Honorable James L. Oberstar
Chairman
Subcommittee on Investigations and Oversight
Committee on Public Works and Transportation
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for giving OTA the opportunity to set the hearing record straight concerning the review of our report Are We Cleaning Up? - 10 Superfund Case Studies.

J. Winston Porter's description of the OTA review of our report was incorrect. The report went through our normal multi-tiered review process. First, after considerable research and analysis, the project staff wrote a report draft that was mailed to the Superfund Implementation Advisory Panel (list attached). The draft was part of a larger package sent to panel members in advance of a scheduled panel meeting at OTA in March 1988. The draft was the high priority item at the meeting because, as we explained to the panel, we had been asked to issue an interim report. The panel was uniformly positive about the draft, and they raised no serious or significant concerns. A few panel members mailed in detailed comments and several others commented by telephone after the meeting. As appropriate, OTA project staff made changes in the draft in response to comments by panel members; however, none were major in character.

Two representatives from EPA attended the Advisory Panel meeting as guests, including Tom Devine, a senior official reporting to Mr. Porter. We have a copy of an internal EPA memo which summarized our advisory panel meeting, and it includes explicit reference to the draft case study work.

Second, there was internal OTA review at the program, division, and agency levels prior to submission of the draft report to the Technology Assessment Board. That submission included the routine, required memorandum from the project director to me summarizing the review process and the responses made to reviewers' comments. TAB members and staff were given two weeks to examine the document and, if necessary, raise concerns. No concerns were raised by TAB.

At no level of review were any major concerns raised about the report and therefore there never was a need to make major revisions which would have called for a second round of review by the Advisory Panel.

In order to reconcile Mr. Porter's comments about speaking to three members of our Advisory Panel, we contacted the three ex-EPA people on our panel because we thought it logical that they might be the members contacted by Mr. Porter. All three confirmed that Mr. Porter or his representative had called them. Two of the three ex-EPA people attended the panel meeting and had favorable comments on the draft; from our phone conversations, it is our understanding that they did not tell Mr. Porter that they had no opportunity to review the draft report. However, they may have indicated to Mr. Porter or his representative that they had not yet seen the final, printed report, which we had provided EPA a week in advance of its release.

In the third case, the panel member had not read the draft material provided him and also had come to the advisory panel meeting late and missed the discussion of the draft. He, therefore, unintentionally, misinformed Mr. Porter by saying that he had not received any draft of the report.

In conclusion, not only did we follow our traditional thorough review process, but at every level of review no serious concerns or problems were raised. Moreover, Mr. Porter had ample evidence that there had been a review of the draft report. Even now, several months after the report was released, no party, including anyone from EPA, has reported to us any error or inaccuracy in the report. We think this testifies to OTA's longstanding commitment to extensive internal and external peer review.

Sincerely,

Jack Gibbons

John H. Gibbons

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Mr. **Nowak**. The meeting is adjourned.

[Whereupon, at 12:09 p.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

○